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ABSTRACT

This publication consists of 73 figures correlated to short summaries that present an overview of employment in the health care field from 1993 to 1998. Most of the information is from public sources. The statistics focus on registered nurses, but also include laboratory technicians, licensed practical nurses, medical scientists, occupational therapists, physical therapists, and respiratory therapists. Some projections for the future also are included. The information is grouped into five sections that cover the following topics: (1) overview and demographics of the health care environment; (2) nurse shortage; (3) wages, hours, and benefits; (4) staffing; and (5) unionization. Fourteen references are listed. (KC)

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THE STATE OF THE HEALTH CARE WORKFORCE 2000

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THE STATE OF THE **HEALTH CARE** WORKFORCE **2000**

Federation of Nurses and Health Professionals/AFT/AFL-CIO
Research Department, American Federation of Teachers/AFL-CIO

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Introduction

Nothing stays the same for long in health care. Changes occur at a dizzying rate, especially for nurses, therapists, technicians, technologists and others who work in the field. Perhaps the best illustration of the constant change we face is the current nurse shortage, which seemed to appear almost over night; in some cases in the very same areas where nurses were laid off only a year or so before.

We may or may not be able to slow the pace of change in health care, but we should be able to track its progress. What's really going on? Are wages going up or down? (The answer, by the way, in terms of real wages, is "down.") How many nurses

are working? Where are they working? Are enough new people coming into the field to take the place of those who are retiring? Is there a nurse shortage everywhere in the country or only in certain regions? What do the facts really say?

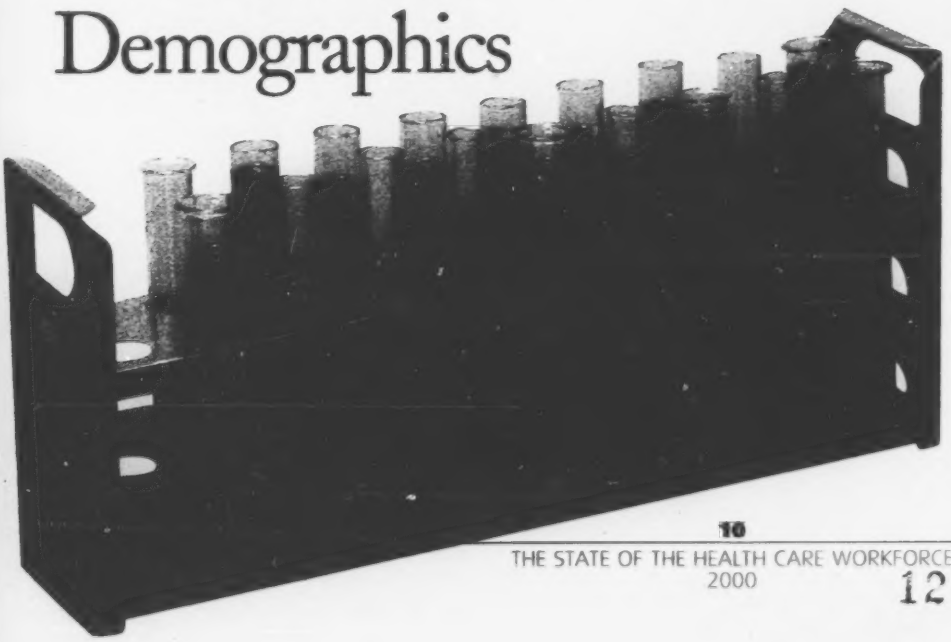
Our goal in this publication is to gather information that can answer those questions and others like them. We don't make any claims for daring originality; we've done some analysis, but for the most part, the information in this almanac is culled from publicly available sources. What we're aiming for is convenience, thoroughness and accessibility. This data may be publicly available, but it's scattered. By pulling it all together into one publication we hope to help researchers, bargainers, nurses, health care writers, health professionals and other interested parties who need a reliable source of answers on the state of nurses and other health professionals today.

We plan to issue this almanac on an annual basis. In addition to providing a snapshot of what the world looks like today, we intend to continue tracking the answers to these questions over time and to address the new questions that tomorrow's fresh round of changes will bring. We hope that, as part of this process, you will let us know what you've found helpful, what you think this publication is missing and additional data sources that might be included in future editions. This is a work in progress. To maximize its usefulness to you, we need to know how you're using it. Please call or write us or visit our Web site at http://www.aft.org/fnhp.

As a union that represents nearly 50,000 nurses and health professionals, we have a point of view on the subjects that are covered in this almanac—wages and benefits; staffing levels; the percentage of the workforce in unions. But the point of this publication is not to tell the reader what we think should be happening; that's for other venues. The point is to tell the reader what is happening in a way that we hope is clear, concise and convenient. Our goal is to show the realities in health care today and the forces that are driving extraordinary changes, so we'll all be in a better position to shape those changes in the future.

Section One

Health Care Environment: Overview and Demographics

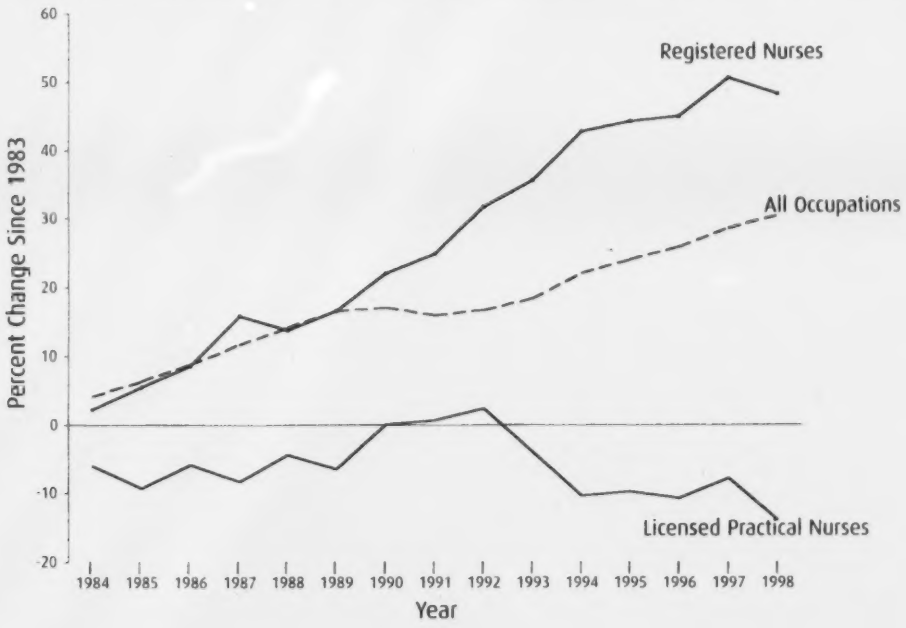


Registered nurses (RNs) are the single largest group of health care workers in this country today, a trend that is likely to continue. Compared to all other occupations, the growth of the RN workforce is phenomenal—growing almost 50 percent from 1983 to 1998, compared to all other occupations, which grew on average only slightly above 30 percent.

Figure 1.1
Total U.S. Employed Registered Nurses: 1983-1998 (in thousands)

Source: *Current Population Survey, 1999,* U.S. Department of Labor, Bureau of Labor Statistics

Figure 1.2
Percent Growth Since 1984 in Average Employment of Registered Nurses and Licensed Practical Nurses Compared to All Occupations: 1984, Total U.S.



Source: *Current Population Survey, 1999,* U.S. Department of Labor, Bureau of Labor Statistics

While other occupations in the health care industry may have grown at a faster pace than RNs over the past decade—such as medical scientists and occupational therapists—in terms of overall numbers, RNs outrank them all, numbering more than 2 million.

Figure 1.3
Percent Growth Over Time of Healthcare Occupations, Total U.S.

	5-year (1993-1998)	10-year (1988-1998)	15-year (1983-1998)
All Occupations	10.1%	14.3%	30.4%
Registered Nurses	**9.3**	**30.3**	**48.1**
Clinical Laboratory Technicians	13.9	32.0	40.7
Licensed Practical Nurses	-10.3	-9.9	-13.9
Medical Scientists	1.2	112.8	207.4
Occupational Therapists	51.2	144.8	153.6
Physical Therapists	16.5	67.5	143.6
Respiratory Therapists	12.0	58.5	49.3

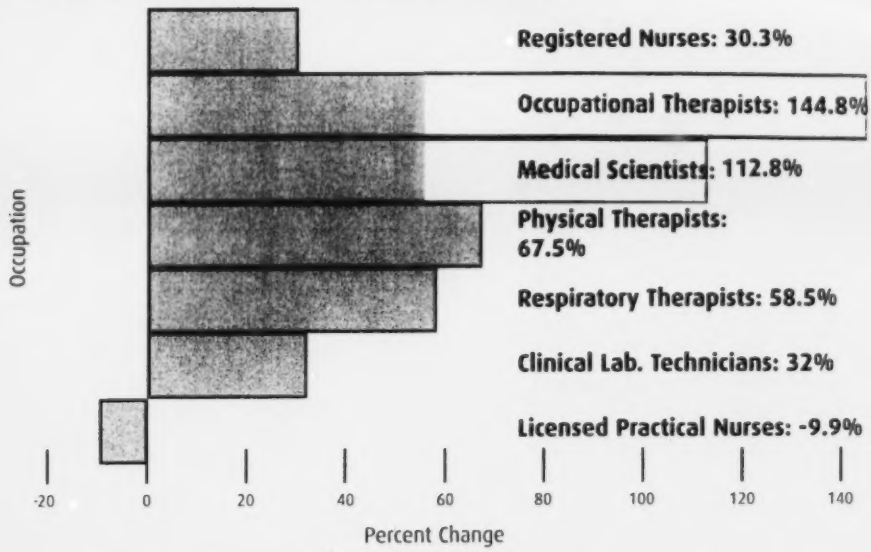
Source: *Current Population Survey, 1999,* U.S. Department of Labor, Bureau of Labor Statistics

Figure 1.4
Total U.S. Employed Registered Nurses and Other Professionals: 1983-1998 (in thousands)

Year	Number of Registered Nurses	Number of Licensed Practical Nurses	Number of Respiratory Therapists	Number of Occupational Therapists	Number of Physical Therapists	Number of Medical Scientists	Number of Clinical Laboratory Technicians and Technologists
1983	1,372	443	69	28	55	27	255
1984	1,402	416	67	22	68	31	281
1985	1,447	402	70	26	60	33	295
1986	1,488	417	73	27	56	30	285
1987	1,588	406	60	30	75	41	259
1988	1,559	423	65	29	80	39	272
1989	1,599	414	63	42	90	46	308
1990	1,673	443	62	37	91	42	297
1991	1,712	445	68	33	101	45	317
1992	1,805	453	77	47	104	66	301
1993	1,859	425	92	47	115	82	315
1994	1,956	397	98	50	106	62	341
1995	1,977	399	94	52	130	61	374
1996	1,986	395	96	64	118	73	376
1997	2,065	408	85	61	110	77	388
1998	2,032	381	103	71	134	83	359

Source: *Current Population Survey, 1999,* U.S. Department of Labor, Bureau of Labor Statistics

Figure 1.5
Ten-year Growth of Registered Nurse Employment Compared with Other Health Professions: 1988-1998, Total U.S.



Source: *Current Population Survey, 1999,* U.S. Department of Labor, Bureau of Labor Statistics

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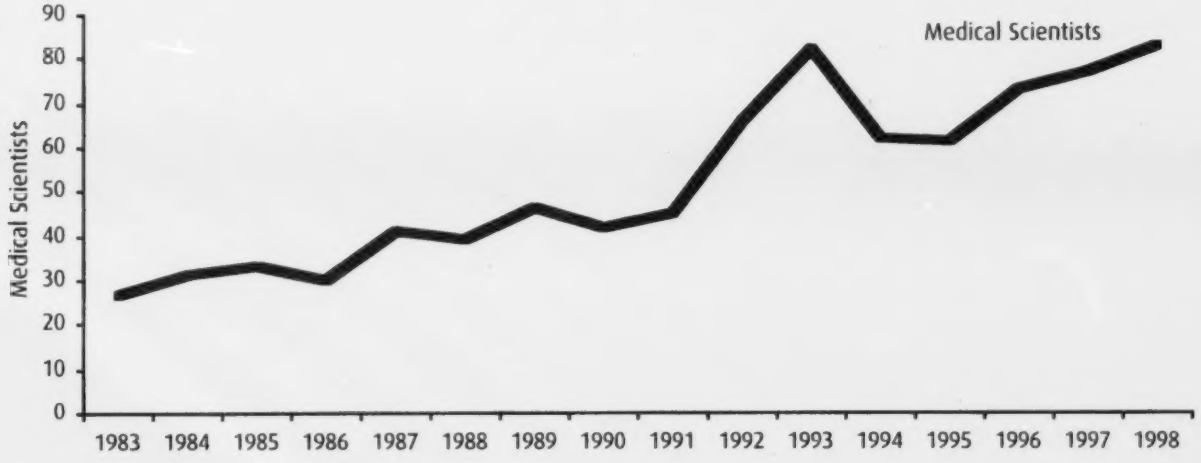
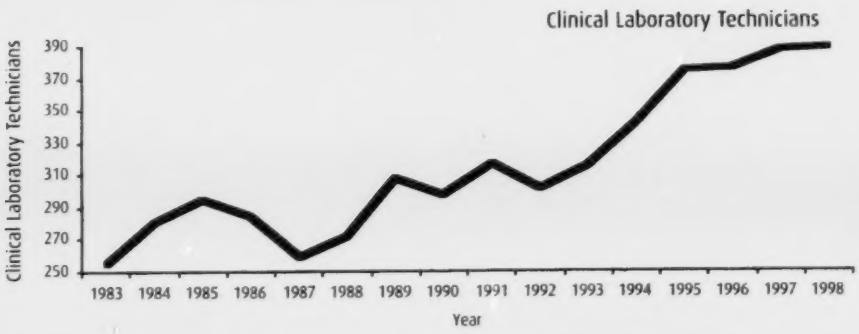
Figure 1.6
Total U.S. Medical Scientists: 1983-1998 (in thousands)



Source: *Current Population Survey, 1999,* U.S. Department of Labor, Bureau of Labor Statistics

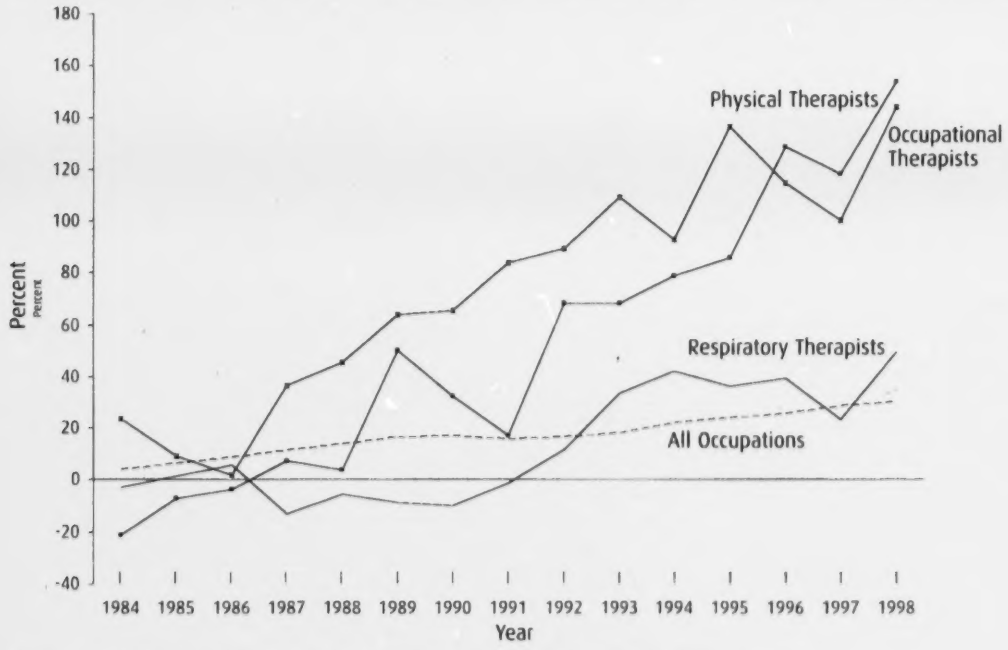
Figure 1.7
Total U.S. Clinical Laboratory Technologists: 1983-98 (in thousands)



Source: *Current Population Survey, 1999,* U.S. Department of Labor, Bureau of Labor Statistics

The growth of occupational, physical and respiratory therapists between 1984 and 1998 eclipsed all occupations. The numbers of employed physical and occupational therapists increased at astounding rates.

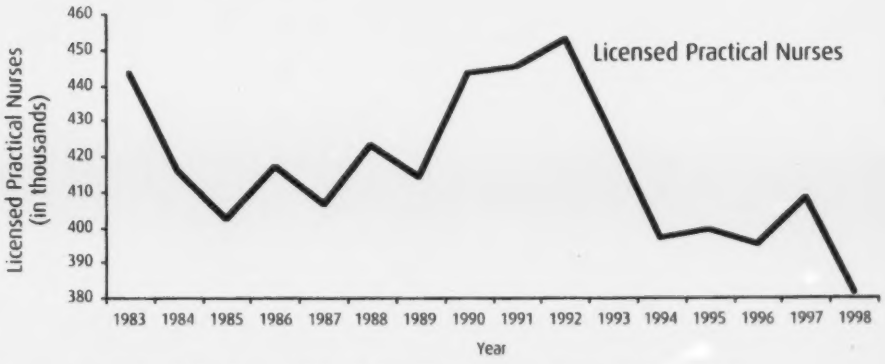
Figure 1.8
Percent Growth Since 1984 in Average Employment of Occupational Therapists, Physical Therapists and Respiratory Therapists Compared to All Occupations: 1984-1998, Total U.S.



Source: *Current Population Survey, 1999,* U.S. Department of Labor, Bureau of Labor Statistics

Interestingly, the number of licensed practical nurses (LPNs) decreased drastically in the early 1990s and continues a downward trend. This is likely due to the increased use of unlicensed personnel in health care facilities, a measure intended to cut costs.

Figure 1.9
Total U.S. Licensed Practical Nurses: 1983-98 (in thousands)



Source: *Current Population Survey, 1999,* U.S. Department of Labor, Bureau of Labor Statistics

Place of employment

A majority—60 percent—of RNs continue to work in acute care hospitals as of 1996, a drop from 66 percent in 1992. This indicates a shift in the industry toward providing care in outpatient settings and patients' homes as opposed to more costly acute care settings.

Figure 1.10
Total U.S. Employed Registered Nurses by Employment Setting: March 1992 and March 1996

	1992	1996
Total	1,853,024	2,115,815
Hospital	1,232,717	1,270,870
Nursing home, extended care facility	128,983	170,856
Nursing education	36,514	48,918
Community/ public health	180,132	278,141
Student health service	50,606	62,932
Occupational health	19,266	21,575
Ambulatory care	144,110	178,930
Other	56,263	82,635
Not known	4,433	957

Source: *Notional Sample Survey of the Population of Registered Nurses, 1992, 1996,* U.S. Department of Health and Human Services, Bureau of Nursing

Most hospital nurses are bona fide employees of the facility in which they work. In 1996, only 1.2 percent of all hospital nurses were employed by temporary agencies.

Employment settings utilizing more RNs than in the past include community or public health (17 percent), nursing homes or other extended-care facilities (8.1 percent) and ambulatory care settings (8.5 percent).

The level of formal education an RN achieves may determine the type of facility where he or she works. The numbers of hospital-based RNs with high school diplomas, associate degrees and bachelor's degrees is fairly evenly distributed and is very similar to those RNs working in community or public health. Nursing homes and other extended-care

Figure 1.11
Employment Setting of Total U.S. Registered Nurses by Work Basis: March 1996

Employment Setting	Employee of Facility	Temporary Agency	Self Employed
All Registered Nurses	**96.6%**	**1.4%**	**1.9%**
Hospital	98.1	1.2	0.6
Nursing home, extended care facility	96.9	0.9	2.1
Nursing education	98.3	0.1	1.2
Community/ public health	93.8	2.8	3.3
Student health service	97.5	1.6	0.8
Occupational health	85.0	4.1	11.0
Ambulatory care	95.4	0.4	4.2
Other	86.1	2.6	10.9

Source: *National Sample Survey of the Population of Registered Nurses, 1996,* U.S. Department of Health and Human Services, Bureau of Nursing

Figure 1.12
Employment Setting and Highest Nursing Related Educational Preparation of Registered Nurses Employed in Nursing: March 1996, Total U.S.

Employment Setting	High School Diploma		Associate Degree		Baccalaureate		Master's Degree		Doctorate Degree	
	Number	%	Number	%	Number	%	Number	%	Number	%
All Registered Nurses	502,959	23.8	731,613	34.6	672,914	31.8	193,159	9.1	14,300	0.7
Hospital	283,880	22.3	466,022	36.7	428,220	33.7	90,257	7.1	2,025	0.2
Nursing Home, Extended Care Facility	51,931	30.4	74,688	43.7	38,177	22.3	5,584	3.3	363	0.2
Nursing Education	2,335	4.8	2,415	4.9	7,438	15.2	27,185	55.6	9,546	19.5
Community/ Public Health	64,495	23.2	92,903	33.4	92,385	33.2	27,489	9.9	829	0.3
Student Health Service	16,630	26.4	12,026	19.1	24,840	39.5	9,394	14.9	43	0.1
Occupational Health	7,449	34.5	4,847	22.5	7,305	33.9	1,974	9.2	—	—
Ambulatory Care	54,457	30.4	53,827	30.1	47,990	26.8	21,579	12.1	903	0.5
Other	21,562	26.1	24,567	29.7	26,380	31.9	9,456	11.4	591	0.7

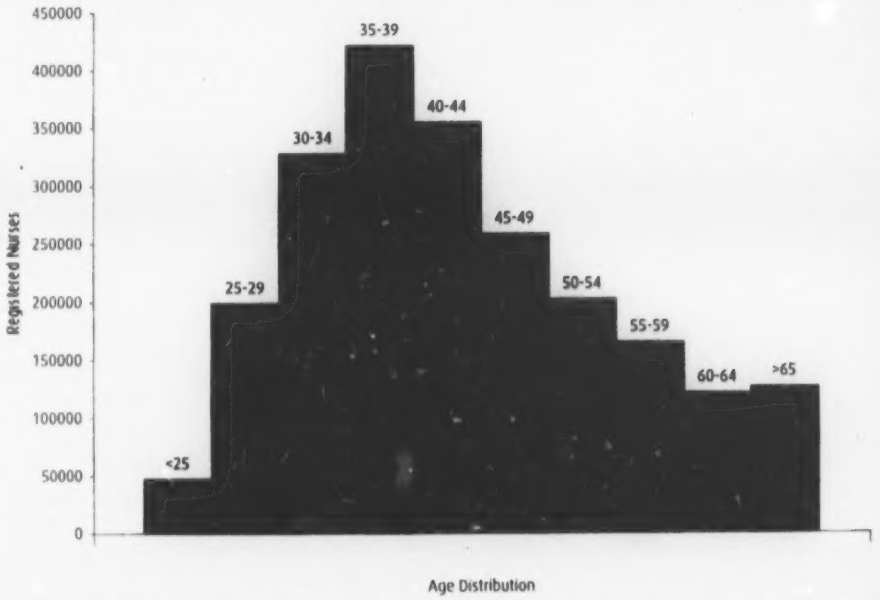
Source: *National Sample Survey of the Population of Registered Nurses, 1996,* U.S. Department of Health and Human Services, Bureau of Nursing

facilities tend to attract more nurses who have not earned a bachelor's degree, while those working in student health services are more likely to have a four-year degree. Not surprisingly, those RNs working in nursing education are the most highly educated, with 55.6 percent holding a master's degree and 19.5 percent achieving the doctorate level.

An aging workforce

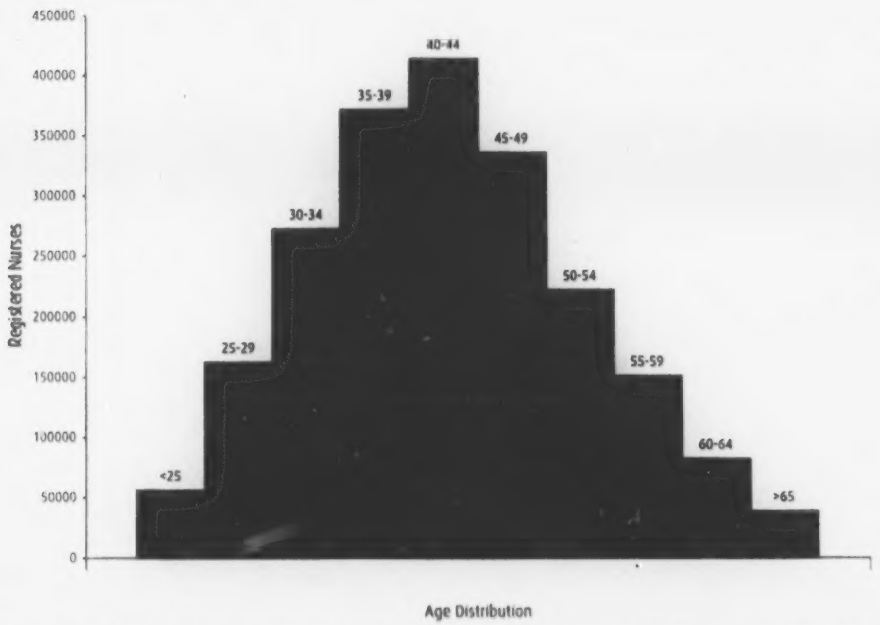
The current nursing workforce is aging. The average age of a working RN has steadily risen. Between 1992 and 1996, a decided shift has occurred in the number of RNs in their forties.

Figure 1.13
Total U.S. Registered Nurses by Age: March 1992



Source: *National Sample Survey of the Population of Registered Nurses, 1992,* U.S. Department of Health and Human Services, Bureau of Nursing

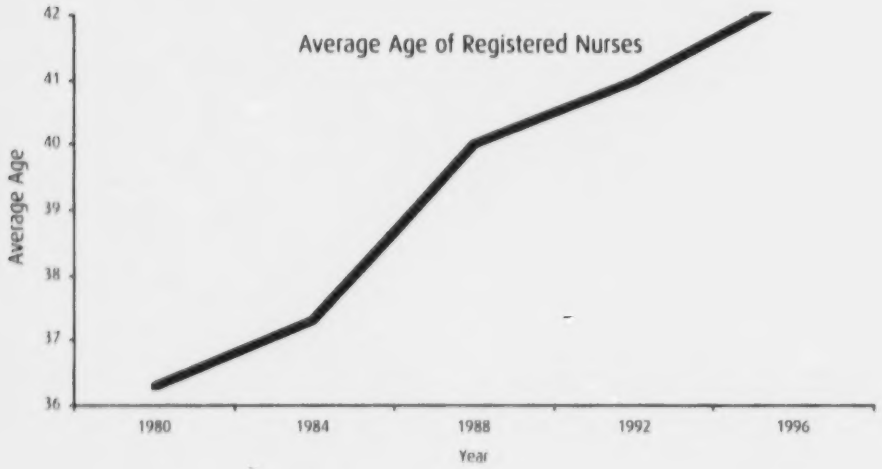
Figure 1.14
Total U.S. Registered Nurses by Age: March 1996



Source: *National Sample Survey of the Population of Registered Nurses, 1996,* U.S. Department of Health and Human Services, Bureau of Nursing

Most recent available data show the average age of RNs to be 42 years. And more than 35 percent of registered nurses are between the ages of 40 and 49, with another 23 percent age 50 or older. The two sources used in Figures 1.16 and 1.17, which look at the average age of employed RNs and the age distribution of RNs compared to all occupations, confirms the trend that the nurse workforce is aging.

Figure 1.15
Total U.S. Average Age of Employed Registered Nurses: 1980-1996



Source: *National Sample Survey of the Population of Registered Nurses, 1980-1996,* U.S. Department of Health and Human Services, Bureau of Nursing

Figure 1.16
Total U.S. Age Distribution of All Occupations and Registered Nurses: 1984 and 1994

	1984		1994	
Age (yr.)	All Occupations	RNs	All Occupations	RNs
16-24	19.7	8.5	15.4	3.4
25-34	28.8	38.5	26.2	26.3
35-54	37.7	43.0	46.3	60.6
55+	13.6	10.1	12.3	9.8

Source: *Current Population Survey, 1984, 1994,* U.S. Department of Labor, Bureau of Labor Statistics

Figure 1.17
Total U.S. Registered Nurses by Age: March 1992 and March 1996

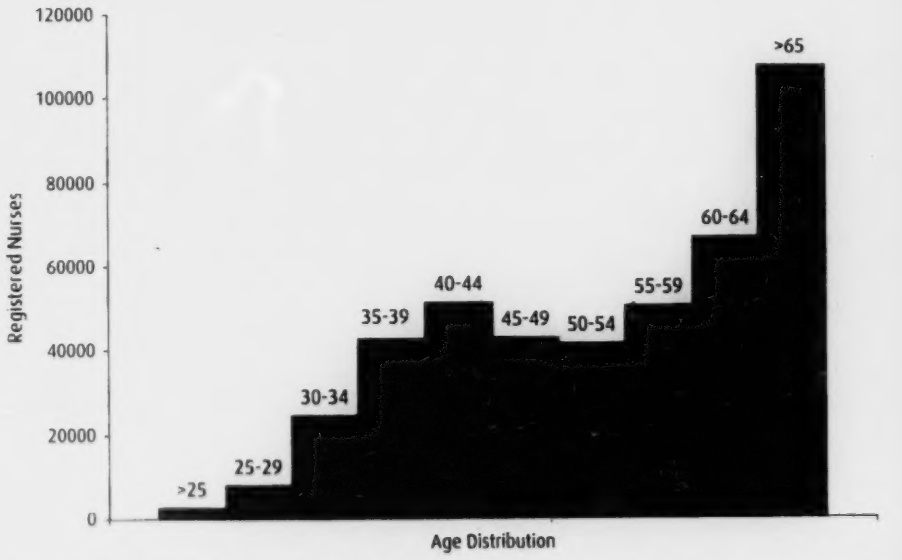
Age :	Number of Registered Nurses 1992:	Number of Registered Nurses 1996:
< 25	47,625	58,012
25-29	198,405	170,277
30-34	328,190	297,119
35-39	421,553	413,931
40-44	355,799	465,188
45-49	259,093	378,569
50-54	202,111	263,635
55-59	164,273	201,114
60-64	120,687	147,951
>65	126,476	145,849
Unknown	15,603	17,230
Total	2,239,816	2,558,874

Source: *National Sample Survey of the Population of Registered Nurses, 1992, 1996,* U.S. Department of Health and Human Services, Bureau of Nursing

Figure 1.18 shows a dramatic increase in nurses over a four-year period in the over-40 age categories and a drop-off in ages 25-39.

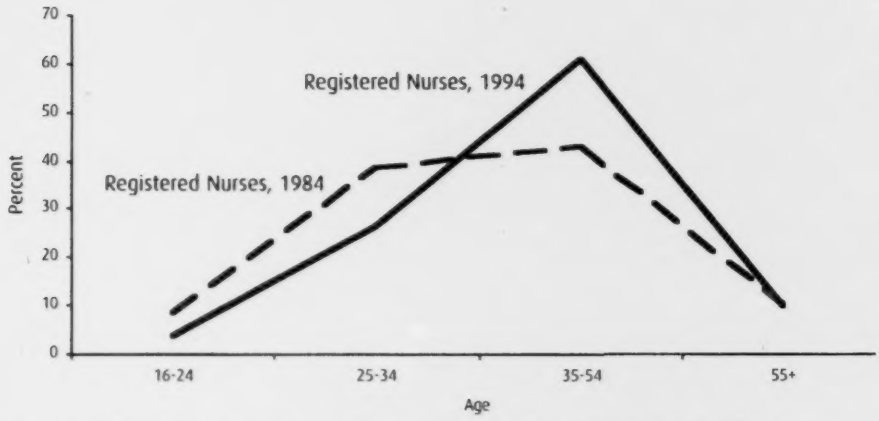
The age distribution among RNs who still hold a nursing license but are no longer employed in the profession is quite similar to that of working RNs, with the exception of nurses over 60—many more of whom are not working. This can be attributed to the number of older nurses who have retired.

Figure 1.18
Age Distribution of Registered Nurses Not Employed in Nursing: March 1996, Total U.S.



Source: *National Sample Survey of the Population of Registered Nurses, 1996,* U.S. Department of Health and Human Services, Bureau of Nursing

Figure 1.19
Age Distribution of Registered Nurses: 1984, 1994, Total U.S.

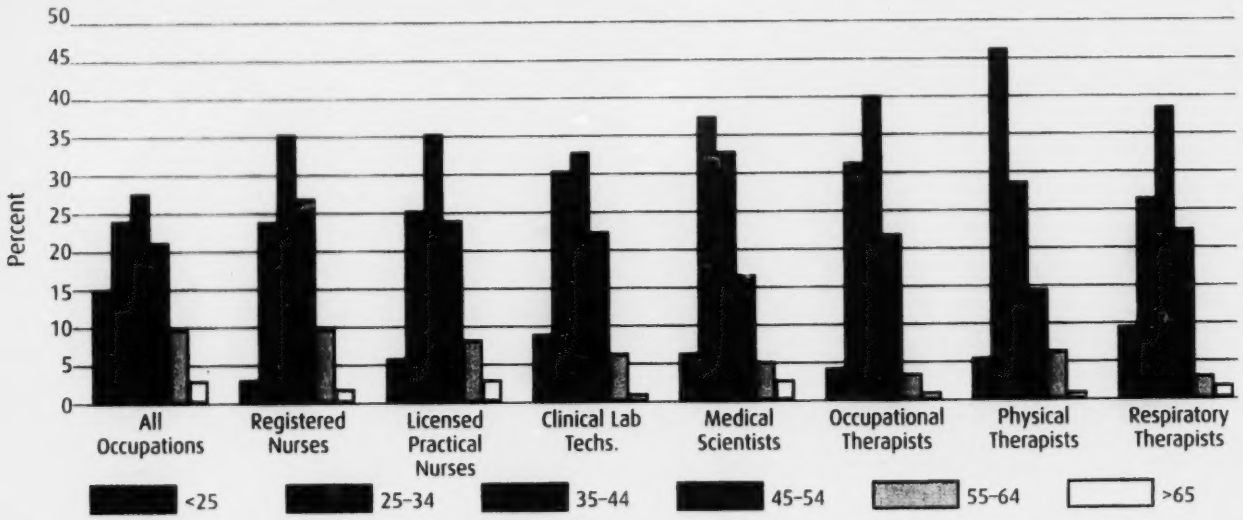


Source: *Current Population Survey, 1984,1994,* U.S. Department of Labor, Bureau of Labor Statistics

The age distribution of RNs over the decade shows that the percentage of RNs over the decade in the younger age brackets has decreased slightly while the percentage of those in the 35-54 age bracket has skyrocketed.

The age distribution among other health care professionals varies. Licensed practical nurses tend to be highly concentrated in the 35-to-44-year age bracket, younger than RNs. The same can be said of clinical laboratory technologists and technicians, occupational therapists and respiratory therapists.

Figure 1.20
Percent Age Distribution by Occupations, 1998, Total U.S.



Source: *Current Population Survey, 1999*, U.S. Department of Labor, Bureau of Labor Statistics

Gender and ethnicity

Historically, more women than men have chosen nursing as a profession, and that remains true today. There has been some success recruiting men into nursing, and while the numbers continue to increase, it has been a slow progression. Between 1980 and 1992, the number of men entering the profession increased by 97 percent to 4.3 percent of the total RN workforce. By 1996, that number had increased to 5.4 percent.

Other health care professions also tend to be dominated by women. Respiratory therapists, occupational therapists, physical therapists, clinical lab technologists and technicians and licensed practical nurses are all occupations that are primarily dominated by women. While more evenly distributed, medical science has

Figure 1.21
Total U.S. Registered Nurses by Gender: March 1996

Gender	Number Employed in Nursing	Percent Employed in Nursing	Number Not Employed in Nursing	Percent Not Employed in Nursing
Male	113,683	5.4%	118	2.5%
Female	2,001,399	94.6	4,389	97.5

Source: *National Sample Survey of the Population of Registered Nurses, 1996,* U.S. Department of Health and Human Services, Bureau of Nursing

Figure 1.22
Gender by Occupation, 1998, Total U.S.

Occupation	Percentage Males	Percentage Females
All Occupations	53.7%	46.3%
Registered Nurses	7.5	92.5
Licensed Practical Nurses	4.0	96.0
Occupational Therapists	17.0	83.0
Clinical Laboratory Technologists and Technicians	21.4	78.6
Physical Therapists	27.1	72.9
Respiratory Therapists	39.2	60.8
Medical Scientists	54.6	45.4

Source: *Current Population Survey, 1999,* U.S. Department of Labor, Bureau of Labor Statistics

more men in the field (55 percent).

The vast majority of health care workers tend to be white. Compared to all occupations, in which 84.3 percent of workers are white, 89.1 percent of RNs are white as are 86.7 percent of physical therapists and 90.5 percent of occupational therapists. Other health care professions also tend to be dominated by whites, although at a lesser percentage than all other occupations. Medical scientists, one job category that has attracted more men than women, has 22 percent of its workforce listed as "other" than white, black or hispanic.

Figure 1.23
Total U.S. Registered Nurses (employed in nursing) by Race/Ethnicity: March 1996

Racial/Ethnic Background	Percentage
White (non-Hispanic)	89.1%
Black (non-Hispanic)	4.3
Asian/Pacific Islander	3.7
Hispanic	1.7
American Indian/ Alaskan Native	0.5
Not Known	0.6

Source: *National Sample Survey of the Population of Registered Nurses, 1996,* U.S. Department of Health and Human Services, Bureau of Nursing

Figure 1.24
Race/Ethnicity by Occupation, 1998, Total U.S.

Occupation	Percent White	Percent Black	Percent Hispanic	Percent Other
All Occupations	84.3%	11.1%	10.1%	4.5%
Registered Nurses	84.3	9.3	3.2	6.3
Licensed Practical Nurses	79.8	17.5	5.8	2.7
Clinical Laboratory Technologists and Technicians	75.9	15.1	6.4	9.0
Medical Scientists	72.4	5.6	5.1	22.0
Occupational Therapists	90.5	6.5	0.7	3.0
Physical Therapists	86.7	4.2	5.4	9.0
Respiratory Therapists	79.5	11.8	2.0	8.8

Source: *Current Population Survey, 1999,* U.S. Department of Labor, Bureau of Labor Statistics

Education levels

Health care professionals tend to be more highly educated on average than other workers. A high school diploma is the highest education level attained by almost a third of all workers, with another third having some type of higher education. By contrast, 34.6 percent of RNs hold associate degrees, 31.8 percent hold bachelor's degrees, and another 9.8 percent hold master's or doctorate degrees.

Other health care occupations require even more schooling. More than 40 percent of clinical laboratory technologists and technicians, 50 percent of physical therapists and 66 percent of occupational therapists have bachelor's degrees. More than 50 percent of medical scientists have Ph.D.s or a professional degree.

Figure 1.25
Education by Occupation, 1998, Total U.S.

	High School Diploma or Equivalent	Associate's Degree	Bachelor's Degree	Master's Degree	Ph. D or Professional Degree
All Occupations	31.9%	8.2%	18.1%	5.9%	2.9%
Registered Nurses	2.0	39.1	43.2	6.3	2.1
Licensed Practical Nurses	17.9	38.5	5.1	0.2	1.1
Medical Scientists	1.8	—	28.6	16.1	50.9
Respiratory Therapists	6.4	55.8	16.1	2.3	2.6
Clinical Laboratory Technologists and Technicians	17.5	17.5	40.8	2.8	1.2
Physical Therapists	6.0	9.4	51.8	27.0	3.4
Occupational Therapists	2.1	9.1	66.0	18.8	0.2

Source: *Current Population Survey, 1999,* U.S. Department of Labor, Bureau of Labor Statistics

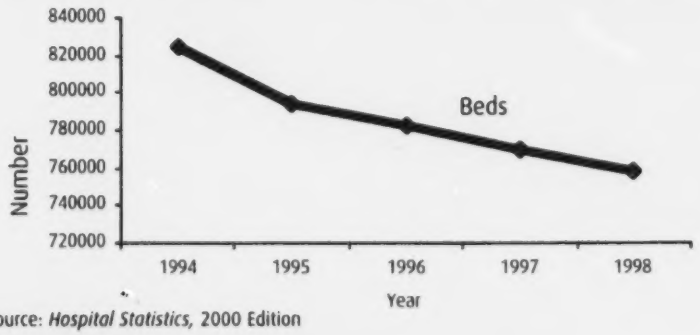
34

The health care industry

Anyone familiar with health care knows that the industry has undergone unprecedented changes in the past decade. The onset of managed care in the early 1990s resulted in hospitals and other types of care settings looking for ways to become more competitive.

As a result, news of hospital mergers and closures became commonplace. Hospitals closed beds and eliminated services that weren't profitable. Nationally, between 1994 and 1998, the number of hospital beds dropped nearly 8 percent.

Figure 1.26
Change in Number of Hospital Beds, (excludes separate nursing home units), 1994-1998, Total U.S.



Source: *Hospital Statistics*, 2000 Edition

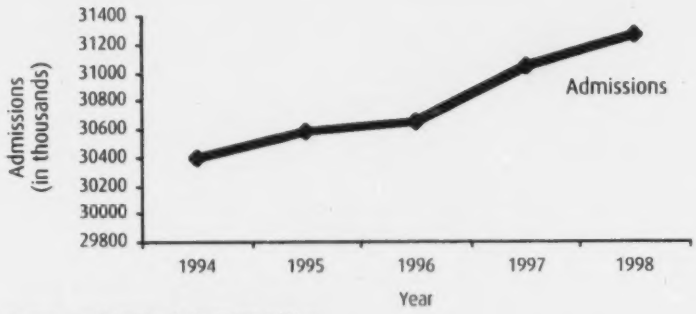
Figure 1.26a
Change in Number of Hospital Beds, (excludes separate nursing home units), 1994-1998, Total U.S.

Year	Number of Beds
1994	824,969
1995	794,502
1996	782,504
1997	769,505
1998	758,186

Source: *Hospital Statistics*, 2000 Edition

At the same time, the number of hospital admissions rose almost 3 percent. Because more procedures were being performed on an outpatient basis, only those most acute patients were admitted to the hospital.

Figure 1.27
Change in Hospital Admissions (excludes separate nursing home units), 1994-1998, Total U.S.



Source: *Hospital Statistics* 2000 Edition

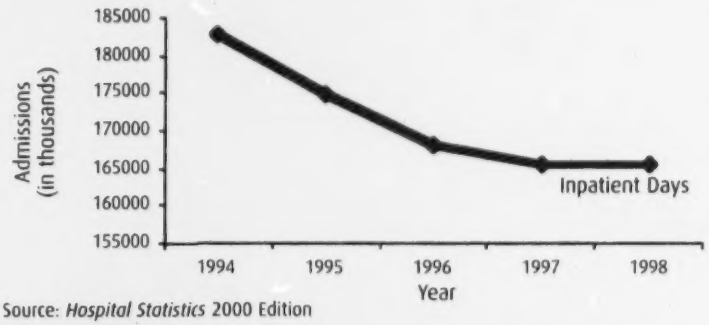
Figure 1.27a
Change in Hospital Admissions (excludes separate nursing home units), 1994-1998, Total U.S.

Year	Number of Hospital Admissions
1994	30,404
1995	30,578
1996	30,653
1997	31,048
1998	31,266

Source: *Hospital Statistics* 2000 Edition

Even though hospital patients were sicker than ever before, the number of inpatient days between 1994 and 1998 dropped by almost 10 percent, and total average length of stay dropped from six days to about 5.3.

Figure 1.28
Changes in Inpatient Days (excludes separate nursing home units), 1994-1998, (in thousands), Total U.S.



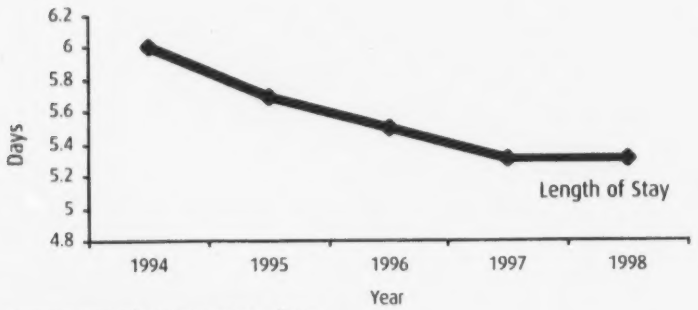
Source: *Hospital Statistics* 2000 Edition

Figure 1.28a
Changes in Inpatient Days (excludes separate nursing home units), 1994-1998, (in thousands), Total U.S.

Year	Inpatient Days
1994	182,703
1995	174,899
1996	168,189
1997	165,605
1998	165,644

Source: *Hospital Statistics* 2000 Edition

Figure 1.29
Change in Length of Stay
(excludes separate nursing home units), 1994-1998, Total U.S.



Source: *Hospital Statistics* 2000 Edition

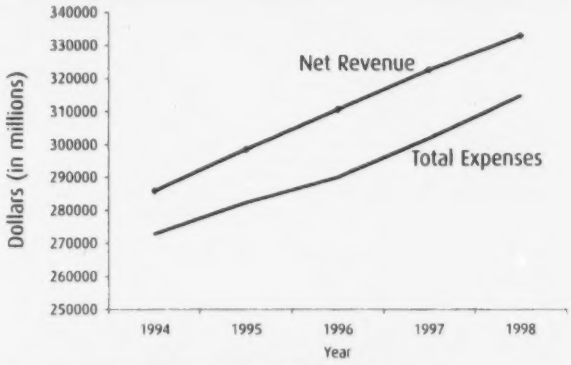
Figure 1.29a
Change in Length of Stay
(excludes separate nursing home units), 1994-1998, Total U.S.

Year	Length of Stay
1994	6.0
1995	5.7
1996	5.5
1997	5.3
1998	5.3

Source: *Hospital Statistics* 2000 Edition

Despite all the ups and downs, the American Hospital Association reports that hospitals' total net revenue between 1994 and 1998 rose consistently. Profits have leveled off in the last two years and now appear to be declining.

Figure 1.30
Hospital Facility (excludes separate nursing home units)
Total Net Revenue and Expenses (in millions), 1994-1998, Total U.S.



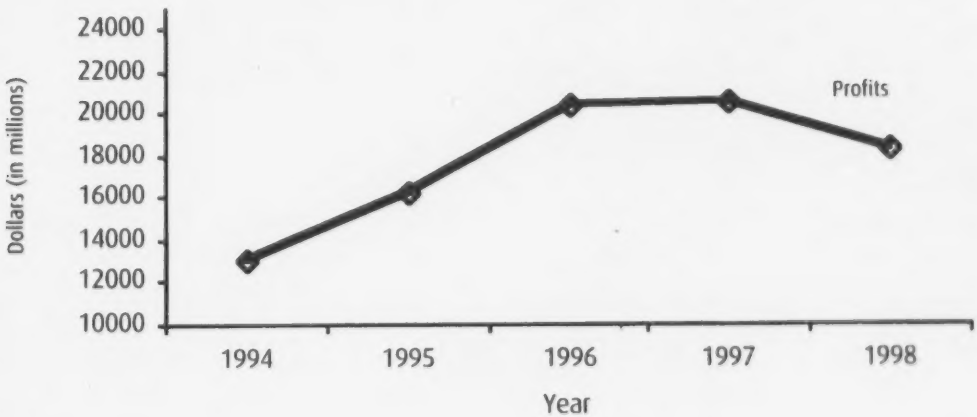
Source: *Hospital Statistics* 2000 Edition

Figure 1.30a
Hospital Facility (excludes separate nursing home units)
Total Net Revenue, Expenses and Profits (in millions), 1994-1998, Total U.S.

Year	Total Net Revenue	Total Expenses	Total Profits
1994	$285,858	$272,840	$13,017
1995	298,520	282,373	16,147
1996	310,513	290,129	20,385
1997	322,460	301,905	20,555
1998	333,055	314,710	18,345

Source: *Hospital Statistics* 2000 Edition

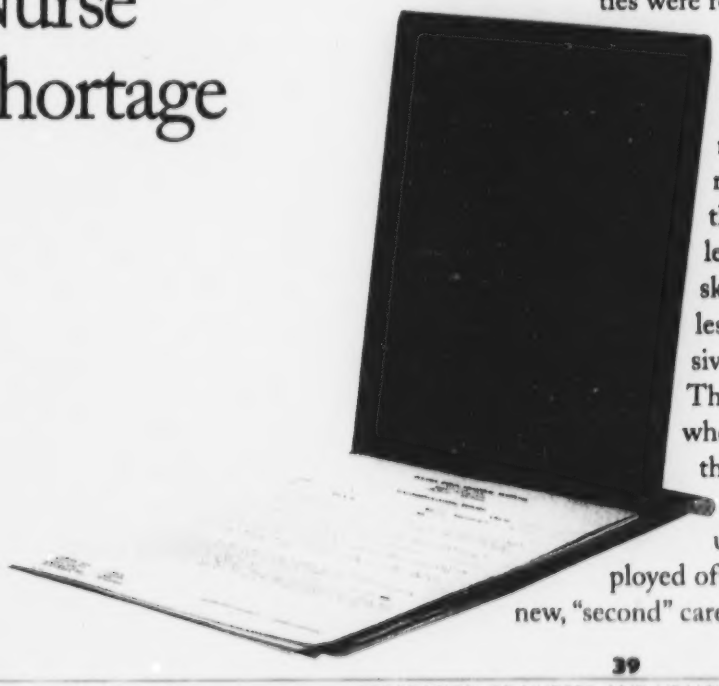
Figure 1.31
Total U.S. Hospital Facility Profits
(excludes separate nursing home units) from 1994-1998



Hospital Statistics Source: 2000 Edition

Section Two

Nurse Shortage



Only a few short years ago, nurses were concerned about losing their jobs as hospitals and other health care facilities were restructured, often laying off nurses and replacing them with lesser-skilled and less-expensive workers. These nurses who found themselves suddenly unemployed often found new, "second" careers that they may have preferred.

Today, nurses are concerned about vacancies in their facilities. They are being forced to work short staffed and often required to work extra shifts or in settings for which they are not properly trained. Many hospitals are trying to hire additional nurses, only to find there are very few nurses available—especially those with experience in specialty areas.

The demand for registered nurses (RNs) in the near future is expected to increase substantially. From 1998 to 2008, it is anticipated that there will be a need for 450,864 additional RNs and 136,444 additional licensed practical nurses (LPNs). Demands for other health-related occupations also are expected to increase—some by as much as 42.6 percent.

FEDERATION OF NURSES AND HEALTH PROFESSIONALS
AMERICAN FEDERATION OF TEACHERS

Figure 2.1
Total U.S. Industry Employment by Occupation, 1998 and Projected 2008

Occupation	Employed 1998	Projected Employed 2008	Employment Change 1998-2008	Percent Change 1998-2008
Total, All Occupations	140,513,683	160,794,600	20,280,917	14.4%
Registered Nurses	2,078,810	2,529,674	450,864	21.7
Occupational Therapists	73,123	98,152	25,029	34.2
Physical Therapists	119,999	160,754	40,755	34.0
Respiratory Therapists	86,449	123,238	36,789	42.6
Clinical Laboratory Technologists and Technicians	313,040	366,377	53,337	17.0
Licensed Practical and Licensed Vocational Nurses	691,953	828,397	136,444	19.7

Source: *Occupational Outlook Report, 1998,* U.S. Department of Labor, Bureau of Labor Statistics

Figure 2.2
Total U.S. Health Services Employment by Industry, 1998 and Projected 2008

Occupation	Employed 1998	Projected Employed 2008	Employment Change 1998-2008	Percent Change 1998-2008
Total, Health Services	10,829,100	13,614,500	2,785,400	25.7%
Offices of Physicians including Osteopaths	1,853,200	2,617,200	764,000	41.2
Offices of Clinics of Dentists	645,900	839,000	193,100	29.9
Offices of other Health Practitioners	449,700	642,200	192,500	42.8
Nursing and Personal Care Facilities	1,762,000	2,212,900	450,900	25.6
Hospitals, Public and Private	4,909,200	5,284,900	375,700	7.7
Medical and Dental Laboratories	198,500	247,100	48,600	24.5
Home Health Care Services	671,600	1,212,100	540,500	80.5
Health and Allied Services	339,000	559,100	220,100	64.9

Source: *Occupational Outlook Report, 1998,* U.S. Department of Labor, Bureau of Labor Statistics

Registered nurses continue to be one of the fastest-growing occupations in the country. The Bureau of Labor Statistics predicts RNs to be one of the 10 fastest-growing job titles between 1998 and 2008.

Figure 2.3
Ten Occupations with the Largest Predicted Job Growth, 1998-2008 (numbers in thousands), Total U.S.

Occupation	Employment		Change	
	1998	2008	Number	Percent
Computer Support Specialists	429	869	439	102%
Systems Analysts	617	1,194	577	94
Personal Care and Home Health Aides	**746**	**1,179**	**433**	**58**
Teacher Assistants	1,192	1,567	375	31
Registered Nurses	**2,079**	**2,530**	**451**	**22**
Cashiers	3,198	3,754	556	17
Truck Drivers, Light and Heavy	2,970	3,463	493	17
General Managers and Top Executives	3,362	3,913	551	16
Office Clerks, General	3,021	3,484	463	15
Retail Salespersons	4,056	4,620	563	14

Source: *Occupational Outlook Report, 1998,* U.S. Department of Labor, Bureau of Labor Statistics

Industry analysts, however, are concerned that there will not be enough nurses to fill the growing need. As the nursing workforce continues to age (Figure 1.15), the industry will rely on younger nurses and new graduates to fill its ranks. Unfortunately, there does not appear to be nearly enough people entering the profession to make that happen.

In its annual surveys of the nation's nursing schools, the American Association of Colleges of Nursing (AACN) has seen a drastic decline in the number of students enrolling in entry-level baccalaureate programs. Between 1998 and 1999, there was a 4.6 percent drop alone, marking the sixth consecutive drop in as many years. Declines in enrollment were seen in every region, according to the AACN, ranging

Figure 2.4
Full and Part-time Enrollment Changes in 410 Schools Reporting in Both 1998 and 1999 by Program Type and Region

Program Type and Region	Number of Schools Reporting	1998 Students	1999 Students	Increase/ Decrease	Percent Change
Entry Level Baccalaureate					
Total US	410	74,857	71,413	-3,444	-4.6%
North Atlantic	97	18,055	16,722	-1,333	-7.4
Midwestern	131	21,876	20,782	-1,094	-5.0
Southern	140	26,108	25,268	-840	-3.2
Western	42	8,818	8,641	-177	-2.0
Mid Level Baccalaureate					
Total US	462	34,469	32,501	-1,968	-5.7
North Atlantic	123	14,578	13,370	-1,208	-8.3
Midwestern	138	8,564	7,894	-670	-7.8
Southern	152	7,172	7,311	139	1.9
Western	49	4,155	3,926	-229	-5.5
Master's Level					
Total US	317	32,298	31,700	-598	-1.9
North Atlantic	99	9,521	9,117	-404	-4.2
Midwestern	80	7,650	7,190	-460	-6.0
Southern	100	9,367	9,407	40	0.4
Western	38	4,546	4,822	276	6.1
Doctoral Level					
Total US	72	2,849	2,873	24	0.8
North Atlantic	20	751	777	26	3.5
Midwestern	16	756	719	-37	-4.9
Southern	27	909	918	9	1.0
Western	9	433	459	26	6.0

Source: *Enrollment and Graduations in Baccalaureate and Graduate Programs in Nursing, 1999-2000*

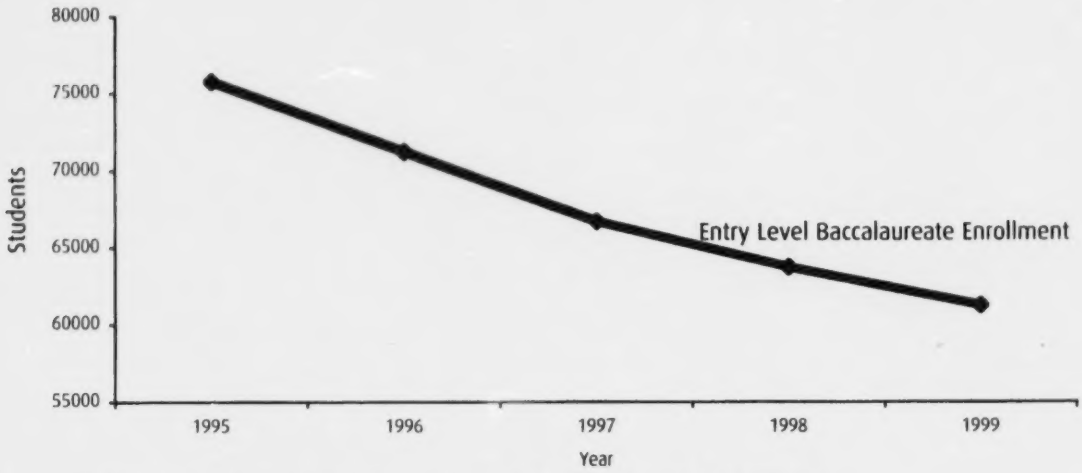
from a 2 percent drop in Western states to a decrease of 7.4 percent in North Atlantic schools. Between 1995 and 1999, these schools saw enrollment drop from about 76,000 students to just over 61,000—a significant decrease of almost 20 percent.

Figure 2.5
Full and Part-time Graduation Changes in the Same Schools Reporting in Both 1998 and 1999 by Program Type and Region

Program Type and Region	Number of Reporting Schools	1998 Students	1999 Students	Increase/ Decrease	Percent Change
Entry Level Baccalaureate					
Total US	407	25,818	23,819	-1,999	-7.7%
North Atlantic	95	5,567	4,835	-732	-13.1
Midwestern	130	7,980	7,215	-765	-9.6
Southern	139	9,225	8,799	-426	-4.6
Western	43	3,046	2,960	-86	-2.8
Mid Level Baccalaureate					
Total US	462	10,600	11,041	441	4.2
North Atlantic	123	3,203	3,499	296	9.2
Midwestern	140	2,794	2,725	-69	-2.5
Southern	152	3,174	3,433	259	8.2
Western	47	1,429	1,482	53	3.7
Master's Level					
Total US	313	10,400	10,124	-276	-2.7
North Atlantic	98	3,209	2,939	-270	-8.4
Midwestern	78	2,218	2,229	11	0.5
Southern	99	3,371	3,416	45	1.3
Western	38	1,602	1,525	-77	-4.8
Doctoral Level					
Total US	72	401	360	-41	-10.2
North Atlantic	20	93	96	3	3.2
Midwestern	16	118	104	-14	-11.9
Southern	27	138	100	-38	-27.5
Western	9	52	60	-8	15.4

Source: *Enrollment and Graduations in Baccalaureate and Graduate Programs in Nursing, 1999-2000*

Figure 2.6
Five-year Entry Level Baccalaureate Enrollment in 337 Schools, 1995-1999, Total U.S.

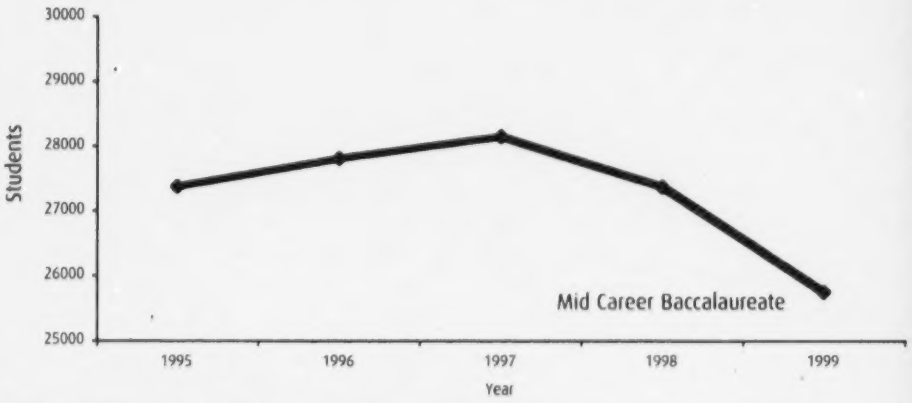


Source: *Enrollment and Graduations in Baccalaureate and Graduate Programs in Nursing, 1999-2000*

The number of registered nurses with diplomas or associate degrees who return to school to obtain a bachelor's degree also has dipped over the past two years. Enjoying an increase from 1995 to 1997, it appears that the number of RNs advancing their careers through higher education—or RNs who left the profession and are looking to re-enter—is dissipating. The anticipated RN shortage is compounded by the decline in the number of mid-career nurses who have left the profession.

Declining nursing school enrollments, coupled with the anticipated increased retirements of registered nurses in the next 10-15 years, could lead to a nursing shortage crisis. Already in certain areas of the country, hospitals and other employers

Figure 2.7
Five-year Mid Career Baccalaureate Enrollment in 368 Schools, 1995-1999, Total U.S.



Source: *Enrollment and Graduations in Baccalaureate and Graduate Programs in Nursing, 1999-2000*

are finding it quite difficult to meet the rising need for RNs, and many have launched aggressive recruitment efforts to lure nurses to their ranks. Employers who are seeking nurses often advertise sign-on bonuses reaching thousands of dollars, increased benefits and other perks. A 1998 survey by the American Organization of Nurse Executives (AONE) found that incentives such as tuition reimbursement and flexible hours are often used when recruiting nurses. As the nursing shortage becomes epidemic, it can be expected that these types of incentives will become more commonplace and perhaps more lucrative.

Recruitment efforts have become much more complicated and time consuming as the supply of RNs begins to dwindle. The same AONE

Figure 2.8
Recruitment and Retention Incentives Provided to Registered Nurses, 1998, Total U.S.

Recruitment/Retention Incentive:	Percent:
Tuition Reimbursement	85%
Flexible Hours	63
Bonus	27
Clinical Ladders	24
Shared Governance	22

Source: *Research on Nurse Staff Shortages*

Figure 2.9
Median Number of Days Required to Fill Registered Nurse Vacancies in Specific Categories, 1998, Total U.S.

Nursing Area	Median Days to Recruit
Nurse Practitioners in Primary Care	60.0
Nurse Practitioners in Acute Care	60.0
Specialty Nurses in Medical Surgical Care	60.0
Specialty Nurses in Critical Care	60.0
Specialty Nurses in Emergency Services	60.0
Specialty Nurses in OR/ Peri-operative	90.0
Specialty Nurses in Mental Health	37.5
Specialty Nurses in Pediatrics	45.0
Specialty Nurses in Obstetrics	60.0
Nurses in Home Care	30.0

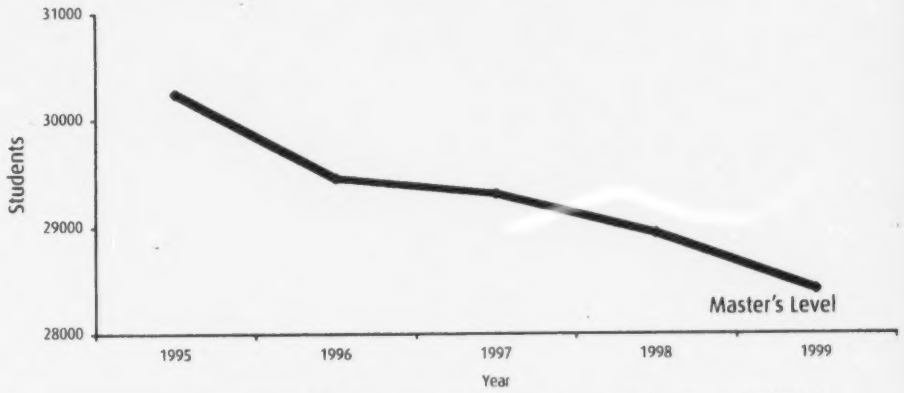
Source: *Research on Nurse Staff Shortages*

survey looked at median days needed to recruit nurses in various hospital units and other types of health care facilities. Home care nurses appear to be the easiest to recruit for vacant nurse positions. It takes 90 days to hire a specialty OR/peri-operative nurse. For most other classifications, it takes 60 days to fill a vacancy.

According to the AACN, the current shortage varies region by region, market by market, depending upon local conditions. Specifically, demand has grown for higher numbers of BSN nurses and for graduate-prepared RNs with advanced practice skills to provide both acute and primary care services.

The numbers of new enrollments in advanced-degree nursing programs have been anything but consistent. Enrollments in master's

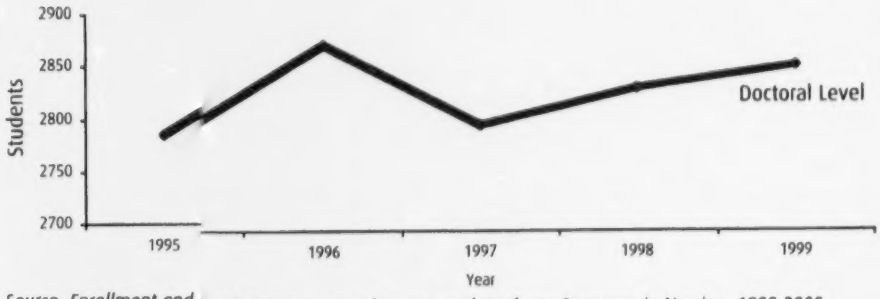
Figure 2.10
Five-year Master's Enrollment in 265 Schools, 1995-1999, Total U.S.



Source: *Enrollment and Graduations in Baccalaureate and Graduate Programs in Nursing, 1999-2000*

degree programs dropped 1.9 percent from 1998 to 1999—declining for the fourth consecutive year. And enrollment and graduations of doctoral students have been sporadic.

Figure 2.11
Five-year Doctoral Enrollment in 71 Schools, 1995-1999, Total U.S.



Source: *Enrollment and Graduations in Baccalaureate and Graduate Programs in Nursing, 1999-2000*

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AMERICAN FEDERATION OF TEACHERS
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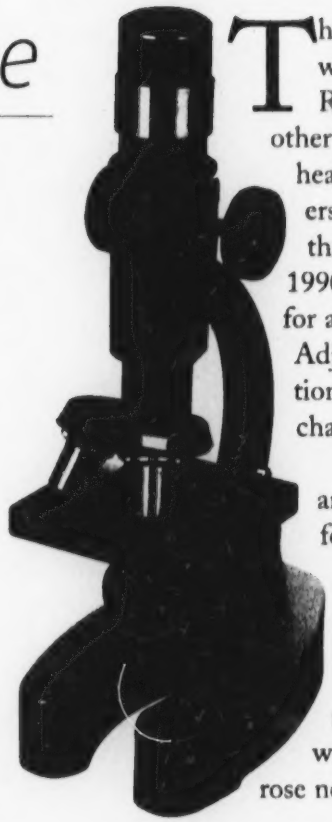
Section Three

Wages, Hours and Benefits

Real wages are falling for most health professionals



The median weekly wages of RNs, LPNs and other full-time health care workers rose steadily throughout the 1990s, as they did for all workers. Adjusted for inflation, the picture changes.

While median weekly wages for the U.S. workforce as a whole rose and fell within a fairly narrow range, real wages for RNs rose nearly 22 percent between 1983 and 1993. The numbers fell nearly 7 percent between 1993 and 1997 compared to an average 1 percent decrease for all workers. A significant increase in 1997-98 restored some lost ground, but 1999 figures indicate the possibility of a downward trend beginning again.

For other occupations listed on Figure 3.1, changes have also been dramatic. Median wages for respiratory therapists rose over 41 percent from 1983 to 1992 before beginning a brief fall and ending the decade with a more moderate increase of 5 percent from 1993 to 1999.

Physical therapists saw large swings in median wages, perhaps because high salaries attracted new entrants to the profession. The addition of these new therapists at entry-

level wages would tend to move the median point downward and perhaps explain some of the swings. Overall, wages for physical therapists rose 23 percent in the decade 1989-99.

Medical scientists saw two individual years of dramatic growth in median wages—in 1994 and 1998—but otherwise saw declines throughout the decade.

Median wages of licensed practical nurses moved up and down less strenuously and ended the decade up 6 percent.

Figure 3.1
Median Weekly Earnings of Wage and Salary Workers Who Usually Work Full-time, by Occupation, 1983-99, Annual Averages in 1999 Dollars, Total U.S.

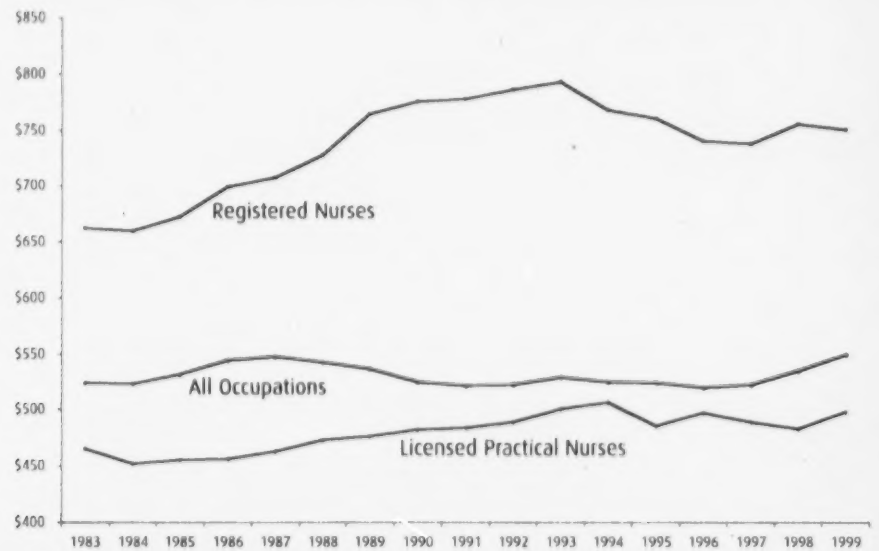
Year	Total, all workers	Registered Nurses	Respiratory Therapists	Physical Therapists	Medical Scientists	Licensed Practical Nurses
1983	$524	$662	$527	—	—	$465
1984	523	659	555	—	—	452
1985	531	672	605	—	—	455
1986	544	699	587	—	—	456
1987	547	707	632	714	—	463
1988	542	727	666	744	—	473
1989	536	764	—	717	—	476
1990	525	775	658	667	—	482
1991	521	777	658	740	—	484
1992	522	786	733	806	739	489
1993	529	792	658	824	730	500
1994	525	767	653	813	785	506
1995	524	760	669	856	753	485
1996	520	740	675	804	700	497
1997	522	737	633	858	672	489
1998	535	755	632	926	772	483
1999	549	750	689	877	724	498

Note: Medians are not shown where base is under 50,000. Such cases are indicated by dashes. Occupational Therapists were left out for that reason.

Source: *Current Population Survey, 1983-1999,* U.S. Department of Labor, Bureau of Labor Statistics. Constant 1999 dollars calculated using CPI-U.

Median weekly earnings for RNs were subject to greater fluctuation than those of the average worker but, as Figure 3.2 indicates, RNs' pay remained significantly higher than the average worker's. The same was not true for LPNs, whose wages remained relatively low.

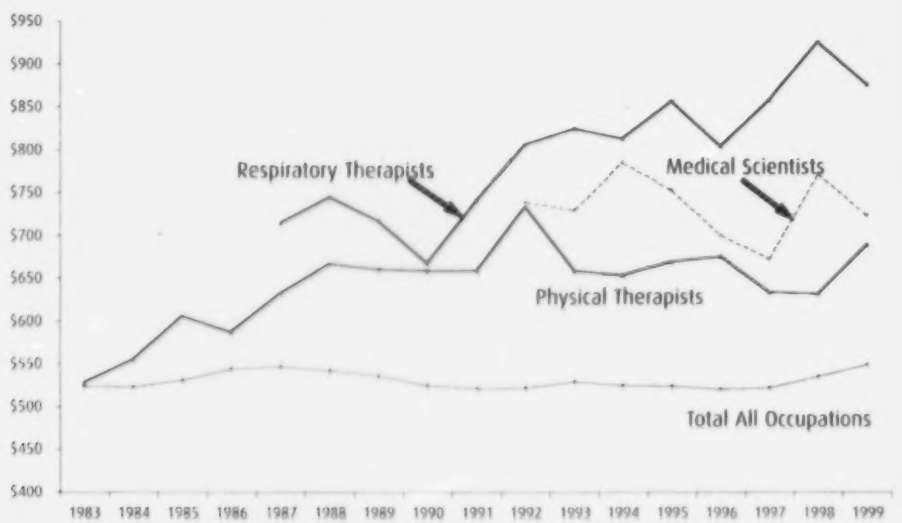
Figure 3.2
Median Weekly Earnings of Wage and Salary Workers Who Usually Work Full-time, for Registered Nurses, Licensed Practical Nurses and All Occupations, 1983-99, Annual Averages in 1999 Dollars, Total U.S.



Source: *Current Population Survey, 1983-1999,* U.S. Department of Labor, Bureau of Labor Statistics. 1999 dollars calculated using CPI-U.

Fluctuations were also evident in the median weekly earnings of respiratory therapists, physical therapists and medical scientists. As with RNs the median weekly earnings remained higher than those of other workers.

Figure 3.3
Median Weekly Earnings of Wage and Salary Workers Who Usually Work Full-time, by Occupation, 1983-99 Annual Averages in 1999 Dollars, Total U.S.

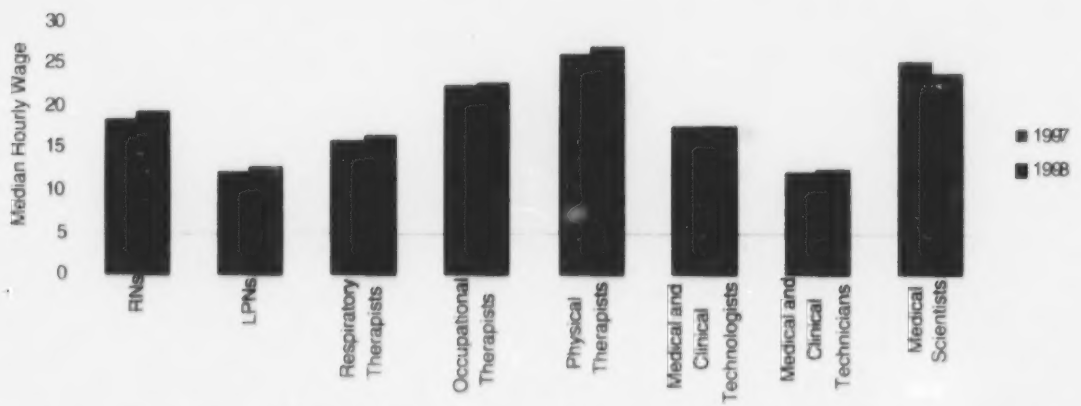


Data for Medical Scientists does not exist prior to 1992. Data for Physical Therapists does not exist prior to 1986. There is no data for Respiratory Therapists for 1989.

Source: *Current Population Survey, 1983-1999*, U.S. Department of Labor, Bureau of Labor Statistics. 1999 dollars calculated using CPI-W.

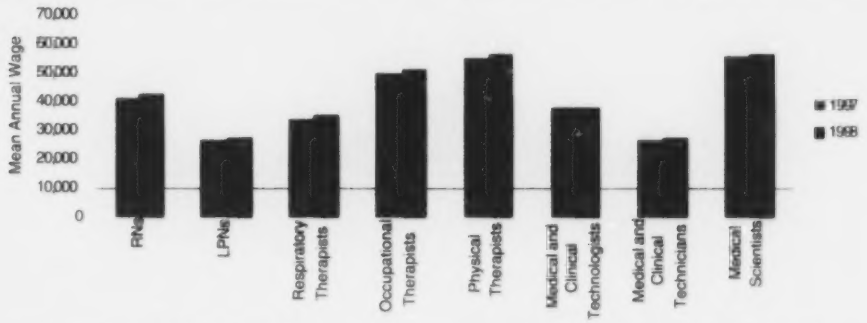
The Bureau of Labor Statistics has created more detailed tables—by specific job categories—in its new series titled "Occupational Employment Statistics." The methodology for gathering these numbers is a bit more refined, but at the moment the series is only available for 1997 and 1998. These figures show that the highest increases in mean hourly wages from 1997-98 were for respiratory therapists, LPNs and RNs.

Figure 3.4
Median Hourly Wage Estimates for Healthcare Workers, 1997, 1998, Total U.S.



Source: *Occupational Employment Statistics, 1998*, U.S. Department of Labor, Bureau of Labor Statistics

Figure 3.5
Mean Annual Earnings Estimate for Healthcare Workers, 1997-1998, Total U.S.



Source: *Occupational Employment Statistics, 1998,* U.S. Department of Labor, Bureau of Labor Statistics

Figure 3.6
Hourly and Annual Wage Estimates for Healthcare Workers, 1997, 1998, Total U.S.

	1997			1998		
Occupation	**Median Hourly**	**Mean Hourly**	**Mean Annual**	**Median Hourly**	**Mean Hourly**	**Mean Annual**
Registered Nurses	$18.88	$19.91	$41,400	$19.56	$20.71	$43,070
Licensed Practical Nurses	12.46	12.94	26,910	12.95	13.48	28,040
Respiratory Therapists	16.04	16.40	34,110	16.75	17.14	35,660
Occupational Therapists	22.80	24.33	50,610	23.19	24.65	51,260
Physical Therapists	26.31	26.95	56,060	27.21	27.49	57,190
Medical Scientists	25.52	27.13	56,430	24.23	27.44	57,060
Medical and Clinical Laboratory Technologists	17.69	18.44	38,350	17.92	18.36	38,190
Medical and Clinical Laboratory Technicians	12.35	12.93	26,900	12.64	13.38	27,840

Source: *Occupational Employment Statistics, 1998,* U.S. Department of Labor, Bureau of Labor Statistics

The Bureau of Labor Statistics' National Compensation Survey also provides specific comparisons for metropolitan regions. We've selected a representative sample of cities to give some sense of regional differences in earnings for health care workers.

For RNs, the Pacific Northwest is the most lucrative area, followed by the urban Northeast. LPNs make the highest wages in the Northeast. Health technologists and technicians are most highly paid in the Baltimore/Washington, D.C., Mid-Atlantic region and in Connecticut.

The Baltimore/Washington, D.C., area is the only one in which health technologists and technicians' wages are actually higher than LPNs. The difference in mean annual earnings among the three

Figure 3.7
Mean Weekly Earnings, Annual Earnings, and Annual Hours Worked for Full-time Healthcare Workers by Regional Area, 1998-99

	Mean Weekly Earnings	Mean Annual Earnings	Mean Annual Hours Worked
Oklahoma City, OK			
Health Related Occupations	$706	$36,620	2,134
Registered Nurses	713	36,928	2,071
Licensed Practical Nurses	445	23,153	2,080
Health Technologists and Technicians	361	18,792	2,080
Miami-Fort Lauderdale, FL			
Health Related Occupations	947	49,235	2,107
Registered Nurses	827	43,005	2,038
Licensed Practical Nurses	534	27,778	2,054
Health Technologists and Technicians	458	23,837	2,076
Washington-Baltimore, DC-MD-VA-WV			
Health Related Occupations	973	49,822	1,925
Registered Nurses	845	43,937	2,077
Licensed Practical Nurses	574	29,830	1,998
Health Technologists and Technicians	640	33,283	2,068
Boston-Worcester-Lawrence, MA-NH-ME-CT			
Health Related Occupations	974	50,620	2,017
Registered Nurses	868	45,091	1,983
Licensed Practical Nurses	658	34,191	2,045
Health Technologists and Technicians	570	29,628	2,073

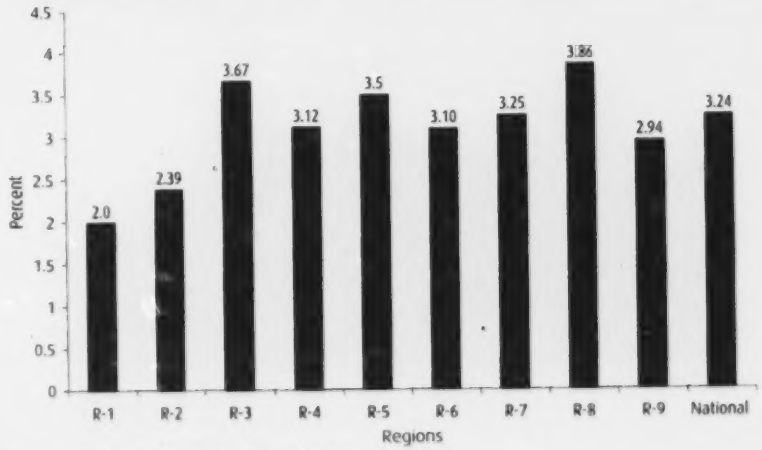
	Mean Weekly Earnings	Mean Annual Earnings	Mean Annual Hours Worked
Hartford, CT			
Health Related Occupations	912	46,499	1,987
Registered Nurses	861	43,929	1,975
Licensed Practical Nurses	660	34,305	2,016
Health Technologists and Technicians	640	33,275	2,020
Milwaukee-Racine, WI			
Health Related Occupations	852	43,993	2,103
Registered Nurses	801	41,661	2,072
Licensed Practical Nurses	535	27,811	2,033
Health Technologists and Technicians	N/A	N/A	N/A
Seattle-Tacoma-Bremerton, WA			
Health Related Occupations	956	48,803	2,039
Registered Nurses	931	47,240	2,020
Licensed Practical Nurses	614	31,902	2,080
Health Technologists and Technicians	578	30,070	2,080

Source: *National Compensation Survey, 1999,* U.S. Department of Labor, Bureau of Labor Statistics

occupational groups is the smallest in Connecticut—where RNs' mean annual earnings are only $9,624 higher than those of LPNs and only $10,654 higher than technologists and technicians. The difference between RN and LPN earnings is greatest in Washington state ($15,338) and in Florida ($15,227). The difference between RN and technologist/technician earnings is greatest in Florida($19,168) and in Oklahoma ($18,136).

The annual Hospital and Healthcare Compensation Service survey of hospitals, shows considerable regional differences in the wage increases offered in 1999. The "South Atlantic," "East South Central" and "Mountain" states showed the highest rate of increase for RNs. "New England" and the "Middle Atlantic" states showed the lowest.

Figure 3.8
Actual Percent Increase for Registered Nurses, by Regions and Nationally for the 12-month Period Ending May 31, 1999.



Source: *Hospital Salary and Benefits Report 1999-2000*

Region 1: *New England*: Connecticut, Maine, Massachusetts, New Hampshire, Rhode Island, Vermont
Region 2: *Middle Atlantic*: New Jersey, New York, Pennsylvania
Region 3: *South Atlantic*: Delaware, District of Columbia, Florida, Georgia, Maryland, North Carolina, South Carolina, Virginia, West Virginia, Puerto Rico
Region 4: *East North Central*: Illinois, Indiana, Michigan, Ohio, Wisconsin
Region 5: *East South Central*: Alabama, Kentucky, Mississippi, Tennessee
Region 6: *West North Central*: Iowa, Kansas, Minnesota, Missouri, Nebraska North Dakota, South Dakota
Region 7: *West South Central*: Arkansas, Louisiana, Oklahoma, Texas
Region 8: *Mountain*: Arizona, Colorado, Idaho, Montana, Nevada, New Mexico, Utah, Wyoming
Region 9: *Pacific*: California, Hawaii, Oregon, Washington

The most recent data from the 1996 Survey of RNs show a relatively small difference between hours scheduled and hours worked for most RNs. Anecdotal evidence, however, would lead us to believe that when the next survey is done in 2000 the differences may be more dramatic.

According to the 1996 figures, the discrepancy between hours scheduled and hours worked was greatest for RNs who worked part time in ambulatory care. Other settings in which the discrepancies were largest for part-time workers included nursing home/extended-day facilities, community/public health and occupational health. For full-time nurses, the discrepancies were greatest in nursing home/extended-day facilities, nursing education, commu-

Figure 3.9
Comparison Between Average Scheduled Hours per Week of Employed Registered Nurses in their Principal Position and Average Actual Hours Worked During the Week Beginning March 18, 1996 by Employment Setting, Total U.S.

Employment Setting	Employed Full-time		Employed Part-time	
	Scheduled hours/week	Actual hours/ week	Scheduled hours/week	Actual hours/week
Total	39.4	41.8	23.1	24.9
Hospital	39.2	41.5	23.8	25.6
Nursing home, extended day facility	39.9	43.2	21.7	23.7
Nursing education	39.8	42.9	21.3	23.1
Community/ public health	39.8	42.4	22.4	24.4
Student health services	36.4	38.8	23.0	23.3
Occupational health	41.0	42.6	21.7	23.7
Ambulatory care setting (non-nurse)	39.8	41.6	21.9	23.4
Ambulatory care (nurse)	39.7	42.2	21.5	27.2
Other	40.5	43.2	21.7	22.9
Not known	39.1	40.4	27.5	27.5

Source: *National Sample Survey of the Population of Registered Nurses, 1996,* U.S. Department of Health and Human Services, Bureau of Nursing

nity/public health and ambulatory care.

Benefits in the health care industry represent approximately 44 percent of total compensation. This is a slightly higher percentage than the all-industry average of 41.3 percent.

The amount of compensation going toward "paid rest periods" is considerably higher in health care (12.9 percent) than in all-industry averages (3.7 percent). The retirement and savings plan payments are slightly lower in health care than in other industries (3.6 percent vs. 6.3 percent). The remaining categories show no significant differences.

Figure 3.10
Major Types of Employee Benefits in the Healthcare and Hospitals Industry as Percentage of Payroll, 1999, Total U.S.

	Total, All Non-Manufacturing Industry	Hospital Industry	Healthcare Industry
Total, All Employee Benefits	38.2%	34.1%	30.7%
Legally Required Payments (Employers' Share Only)	8.4	7.9	9.3
Retirement and Savings Plan Payments (Employers' Share Only)	9.3	6.2	3.6
Life Insurance and Death Benefits Payments (Employers' Share Only)	0.3	0.2	0.0
Medical and Medically -Related Benefits (Employers' Share Only)	8.6	8.2	5.2
Payments for Time Not Worked	11.0	11.2	12.1
Miscellaneous Benefits	0.6	0.5	0.3

Source: *The 1999 Employee Benefits Study*

Figure 3.11
Benefits Cost for Health and Hospital Industries and All Industries, 1999, Total U.S.

	Total, All Manufacturing Industry	Hospital Industry	Healthcare Industry
Total Employee Benefits as Cents Per Payroll Hour	719.2	581.1	621.8
Total Employee Benefits as Annual Dollars Per Employee	$15,034.	$11,680	$12,731

Source: *The 1999 Employee Benefits Study*

As in most industries, there is a significant difference between full-time employees and part-time employees in terms of benefits received. Full-time RNs are much more likely to have health insurance coverage, vacation days and other benefits. The only area in which part-timers receive better benefits is, of course flexible working hours.

Figure 3.12
Comparison of Benefits Received by Full-Time and Part-Time Registered Nurses, 1999, Total U.S.

Benefit	Percent Receiving Benefit	
	Full Timers	Part Timers
Retirement Plan (excluding Social Security)	89%	72%
Vacation Days	86	67
Health Insurance	83	51
Sick Days	80	57
Free Parking	79	74
Paid Holidays	78	54
Life Insurance	74	42
Dental Insurance	73	46
Tuition Reimbursement	64	50
On-Site Continuing Education	58	52
Disability Insurance	53	26
Continuing Education Reimbursement	51	42
Personal Days	50	37
Maternity Leave	38	27
Vision Plan	36	24
Flexible Working Hours	25	30
Clinical Ladder	21	19
Malpractice Insurance	20	16
Gym/ Health Facilities	20	18
Uniform Allowance	9	6
On-Site Childcare/ Reimbursement	7	4
Job Sharing	3	6
Subsidized Housing	2	1
Other	1	3

Unless otherwise noted, figures in this table have been rounded and apply to Registered Nurses working in acute care hospitals.

Source: *1999 Earnings Survey.*

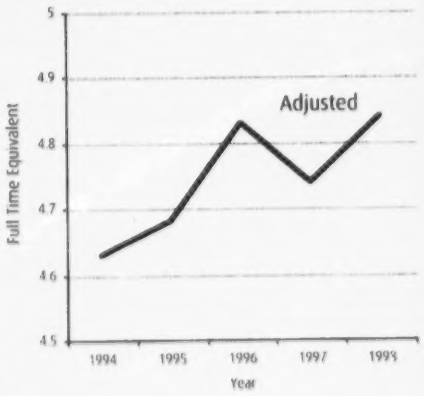
Section Four

Staffing

In survey after survey, registered nurses continually cite short staffing as their number-one concern as related to quality patient care. Unfortunately, there is no concrete data available that looks at actual staffing levels in the nation's hospitals, just as there are no comprehensive laws, rules or guidelines governing what those staffing levels should be.

The Center for Healthcare Industry Performance Studies has collected information on the total number of full-time equivalents (FTEs) per occupied hospital bed (Figure 4.1). There are many problems with relying on this data when looking at nurse staffing levels. First, there is no indication in this data to determine which job classifications these FTEs are in. There is no way to conclude if the increase in FTEs from 1997 to 1998 meant an increase in direct patient care staff or in management.

Figure 4.1
Full-time Equivalents (FTEs) per Occupied Bed for All U.S. Medians, 1994-98



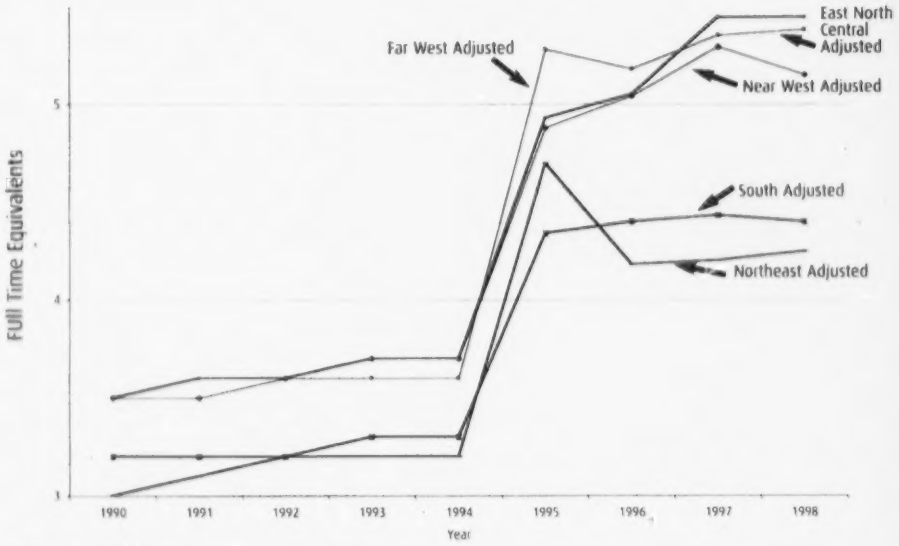
Note: Adjusted for case mix.

1998-99 Almanac of Financial and Operating Indicators

Data from the same source shows that trends in usage of FTEs is fairly consistent, regardless of the geographic location. Every region saw an increase in FTEs between 1994 and 1995, and then those levels moderated.

The average number of FTEs per occupied bed between 1990 and 1998 was greatest in the Near West and Far West states and worst in the Northeast.

Figure 4.2
Full-Time Equivalents (FTEs) per Occupied Bed in All Regions, 1990-98.



Note: Adjusted for case mix.

Source: *1998-99 Almanac of Financial and Operating Indicators*

Figure 4.3
Full-Time Equivalents (FTEs) per Occupied Bed in All Regions, 1990-98.

	Year								
Region	**1990**	**1991**	**1992**	**1993**	**1994**	**1995**	**1996**	**1997**	**1998**
Northeast	3.0	3.1	3.2	3.2	3.2	4.1	4.2	4.2	4.3
South	3.2	3.2	3.2	3.3	3.3	4.3	4.4	4.4	4.4
Near West	3.5	3.6	3.6	3.7	3.7	4.9	5.1	5.4	5.4
East North Central	3.5	3.5	3.6	3.7	3.7	4.9	5.0	5.3	5.2
Far West	3.5	3.5	3.6	3.6	3.6	5.3	5.2	5.4	5.4

Note: Adjusted for case mix.

Source: *1998-99 Almanac of Financial and Operating Indicators*

Regional Divisions:

Northeast: Connecticut, Maine, Massachusetts, New Hampshire, New Jersey, New York, Pennsylvania, Rhode Island, Vermont

South: Alabama, Delaware, Florida, Georgia, Kentucky, Maryland, Mississippi, North Carolina, Tennessee, Virginia, West Virginia

Near West: Arkansas, Iowa, Kansas, Louisiana, Minnesota, Missouri, Nebraska, North Dakota, South Dakota, Texas

East North Central: Illinois, Indiana, Michigan, Ohio, Wisconsin

Far West: Alaska, Arizona, California, COlorado, Hawaii, Idaho, Montana, Nevada, New Mexico, Oregon, Utah, Washington, Wyoming

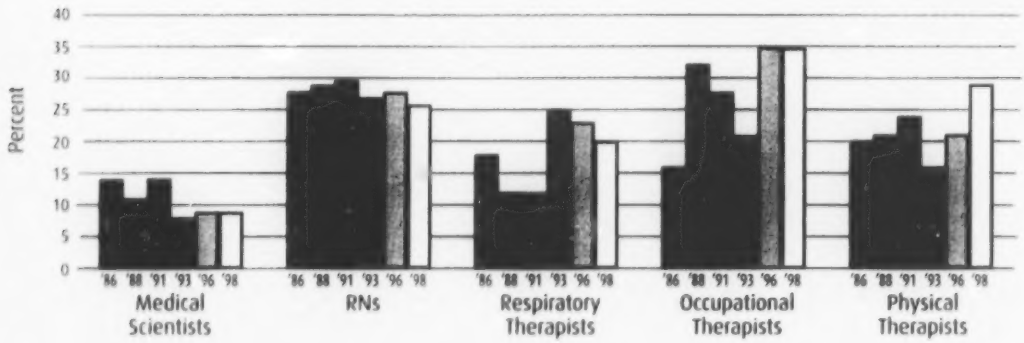
There are many reasons for the current staffing problems in the nation's health care facilities. Mass layoffs of health care workers were a regular part of business in the early 1990s. Many of those health care professionals moved on to other careers outside the health care industry. Other workers were moved—either voluntarily or involuntarily—to part-time status, oftentimes saving the employer money in benefits. This trend seems to be especially true of respiratory therapists, occupational therapists and physical therapists.

Figure 4.4
Percentage of Healthcare Workers who are Part-time (less than 35 hours per week), 1986-1998, Total U.S.

	Year					
Occupation	1986	1988	1991	1993	1996	1998
Registered Nurses	28%	29%	30%	27%	28%	26%
Medical Scientists	14	11	14	8	9	9
Registered Nurses	28	29	30	27	28	26
Respiratory Therapists	18	12	12	25	23	20
Occupational Therapists	16	32	28	21	35	35
Physical Therapists	20	21	24	16	21	29

Union *Membership and Earnings Data Book: Compilations of the Current Population Survey*, 1997 and 1999 editions

Figure 4.5
Percentage of Healthcare Workers Who Work Part-time, 1986-98, Total U.S.



Source: *Union Membership and Earnings Data Book: Compilations of the Current Population Survey, 1997 and 1999 editions*

Different mechanisms can be used to staff a particular health care facility or unit. Debate continues over the best use of acuity systems, nurse-to-patient ratios and other staffing systems.

A 1998 survey sponsored by the American Organization of Nurse Executives found that more than 60 percent of hospitals used acuity systems when staffing their units. Floating and flexible scheduling, staffing mechanisms abhorred by staff nurses, were used 18 percent of the time.

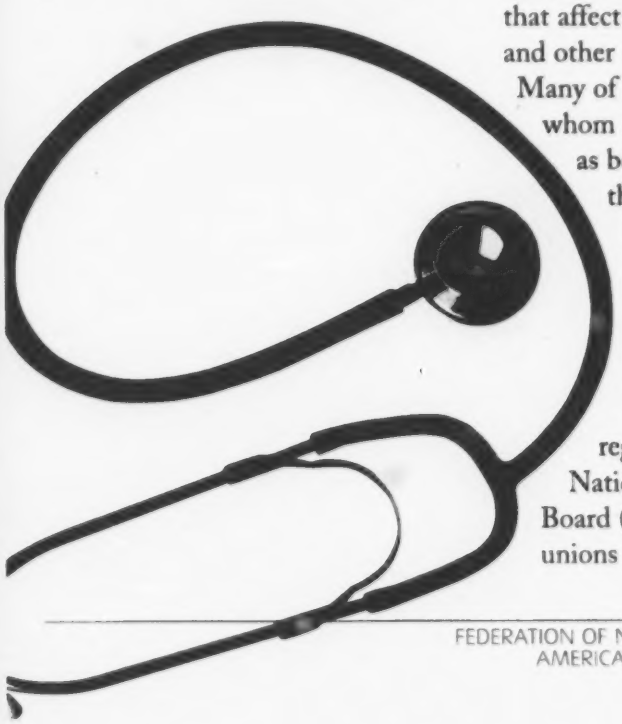
Figure 4.6
Mechanisms Used to Staff the Patient Census, 1998, Total U.S.

Mechanism	Percent of Respondents
Acuity Based System	61%
Productivity Based System	40
Flexible Scheduling, Float Pools	18
Supervisor Judgement	3

Source: *Research on Nurse Staff Shortages*

Section Five

Unionization



Health care workers in general, and nurses in particular, are increasingly discontent with changes brought about in their workplaces as a result of managed care, including cost-cutting measures that affect staffing levels, work hours and other conditions of employment. Many of these workers, some of whom shunned organized labor as being "unprofessional" in the past, are now turning to labor unions as a means of making changes at their workplaces—primarily in relation to staffing and other patient care issues. As a result, almost 20,000 registered nurses voted in National Labor Relations Board (NLRB) elections to join unions during 1998 and 1999. Still, less than 15 percent of all RNs were union members in 1998—a 2 percent drop from 10 years earlier. Approximately 13.9 percent of all wage and salary workers in this country were unionized in 1999.

Figure 5.1
Percentage of Wage and Salary Workers Who are Unionized, 1999, Total U.S.

Note: 13.9 percent of all wage and salary workers are unionized (16.5 million workers).

Source: *Current Population Survey, 1999,* U.S. Department of Labor, Bureau of Labor Statistics

Other health care occupations are unionized at about the same density, although physical therapists and medical scientists are barely organized at all. Only a little more than 10 percent of occupational therapists were union members in 1998, even though almost one out of every four carried a union card just 10 years earlier. During that same decade, the union member density of medical scientists, while already low at 11.3 percent in 1988, dropped to less than 2 percent.

Figure 5.2
Union Member Density* of all Healthcare Workers, Select Years: 1986-1998, Total U.S.

Occupation	1986	1988	1991	1993	1996	1998
Registered Nurses	15.7%	16.7%	17.2%	16.1%	15.5%	14.7%
Medical Scientists	5.0	11.3	6.7	6.8	6.0	1.9
Respiratory Therapists	8.1	12.9	5.3	10.2	11.7	15.1
Occupational Therapists	12.9	23.5	4.8	12.0	8.1	10.5
Physical Therapists	7.8	3.1	3.8	5.0	4.4	4.6

Percentage of workers who are union members in public and private sectors

Source: *Union Membership and Earnings Data Book: Compilations of the Current Population Survey,* 1997 and 1999 editions

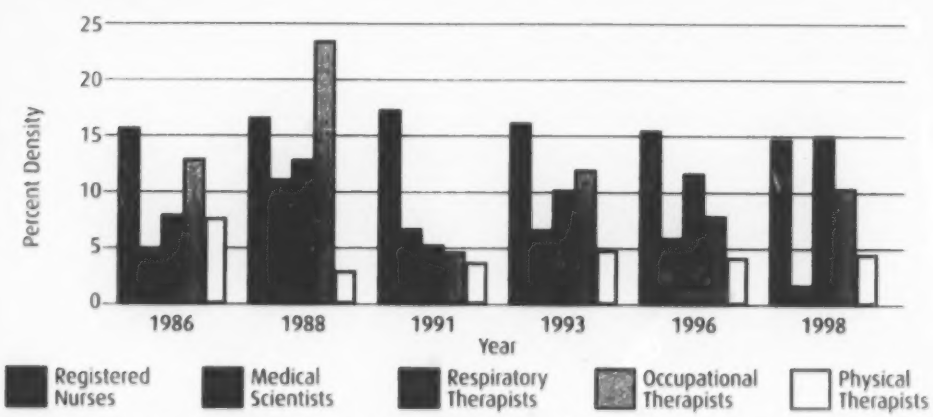
Figure 5.3
Coverage Density* of Healthcare Workers, Select Years: 1986-1998, Total U.S.

Occupation	1986	1988	1991	1993	1996	1998
Registered Nurses	20.2%	19.8%	20.5%	19.0%	17.9%	16.8%
Medical Scientists	6.7	11.3	8.7	8.0	9.2	3.2
Respiratory Therapists	12.9	15.1	5.5	14.7	13.0	17.9
Occupational Therapists	16.2	25.7	10.5	15.7	8.1	14.0
Physical Therapists	8.0	3.8	7.3	9.7	6.5	7.1

Percentage of workers covered by a collective bargaining agreement

Source: *Union Membership and Earnings Data Book: Compilations of the Current Population Survey,* 1997 and 1999 editions

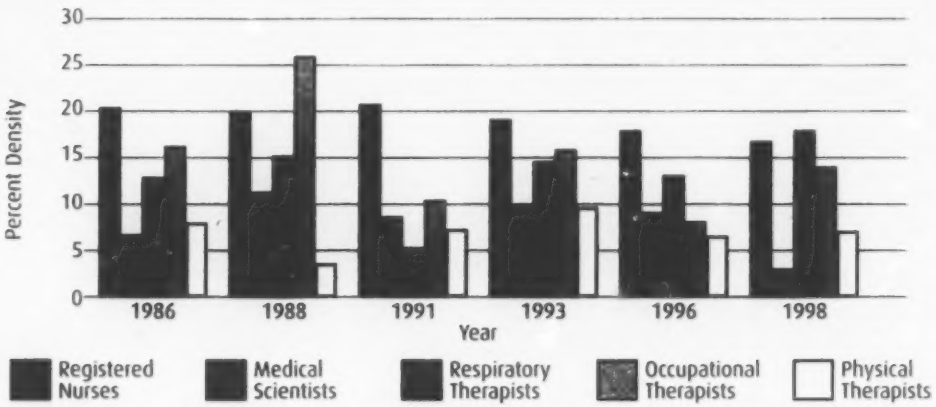
Figure 5.4
Union Member Density* of all Healthcare Workers, Select Years: 1986-1998, Total U.S.



*Percentage of workers who are union members in public and private sectors.

Source: *Union Membership and Earnings Data Book: Compilations of the Current Population Survey,* 1997 and 1999 editions

Figure 5.5
Coverage Density* of Healthcare Workers, Select Years: 1986-1998, Total U.S.



Percentage of workers covered by a collective bargaining agreement

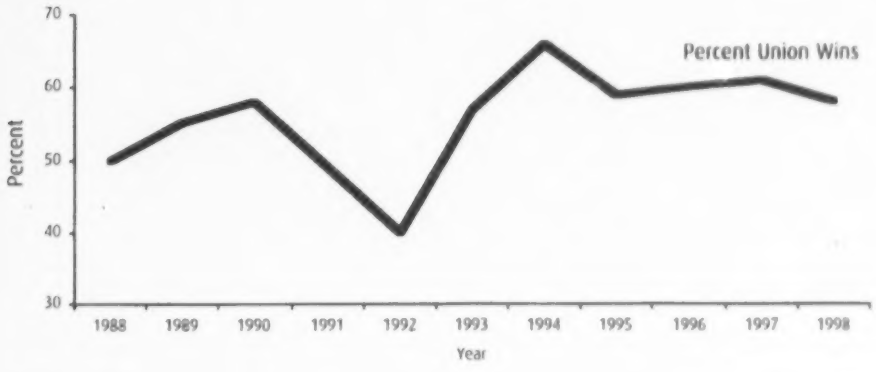
Source: *Union Membership and Earnings Data Book: Compilations of the Current Population Survey,* 1997 and 1999 editions

Unionization among hospital workers has always been cyclical—even during times of relative calm in the industry. The number of NLRB elections held across the country for hospital workers has ranged from a low of 80 in 1989 to a high of 140 in 1997. Only in two of 10 years during 1988-1998 were employers successful more often than workers who wanted to form unions—in 1991, when unions won just 49 percent of the time, and the following year, when that number dropped to 40 percent. In the timeframe since managed care emerged as a dominant player in health care—1994 and later—the number of hospital elections and the number of union wins have been higher.

Figure 5.6
Hospital National Labor Relations Board Elections, 1988-1998, Total U.S.

Source: *Labor Database*

Figure 5.7
Percent Union Wins in National Labor Relations Board Elections, 1988-1998*, Total U.S.



*Through 9/98

Source: *Labor Database*

Even though the greatest number of hospital representation elections was held in 1994, the greatest number of eligible voters was in 1997 when more than 26,000 hospital workers voted in union elections. That also was the year of highest union membership growth in the hospital industry.

Organizing home health care workers has been sporadic, as well. While the number of elections every year is much smaller than that of hospitals, the win rate for workers and their unions is much higher—falling below 50 percent only once in 10 years and seeing win rates as high as 82 percent in 1991.

Figure 5.8
Hospital National Labor Relations Board Elections, 1988-98, Total U.S.

Year	Number of Elections	Percent Union Wins	Number of Eligible Voters	Number of Additional Union Members
1988	92	50%	18,980	9,097
1989	80	55	12,148	5,429
1990	108	58	17,809	7,569
1991	132	49	16,024	6,238
1992	94	40	11,847	3,287
1993	100	58	13,502	7,149
1994	109	66	10,180	7,553
1995	94	59	12,284	5,080
1996	119	60	19,699	11,531
1997	140	61	26,156	13,747
1998*	122	58	16,562	7,868

*Through 9/98

Source: *Labor Database*

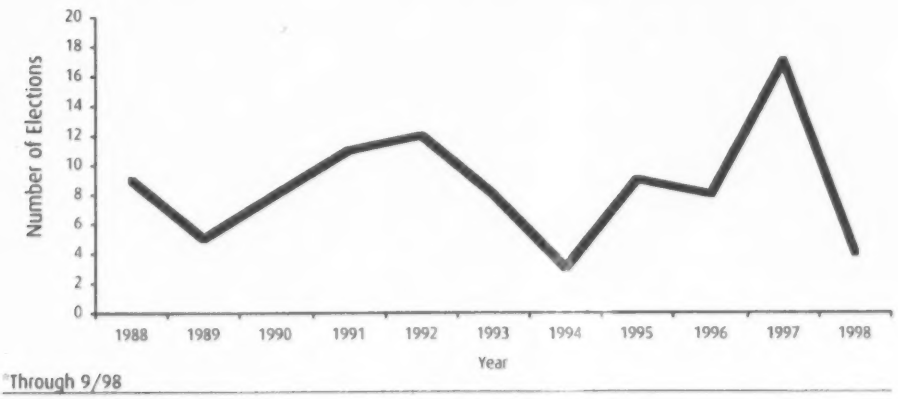
Figure 5.9
Home Healthcare Services National Labor Relations Board Elections, 1988-1998, Total U.S.

Year	Number of Elections	Percent Union Wins	Number of Eligible Voters	Number of Additional Union Members
1988	9	78%	122	81
1989	5	40	264	67
1990	8	75	1,024	854
1991	11	82	566	408
1992	12	75	1,107	546
1993	8	50	607	206
1994	3	67	88	50
1995	9	67	733	500
1996	8	75	541	270
1997	17	53	1,593	983
1998*	4	75	683	659

* Through 9/98

Source: *Labor Database*

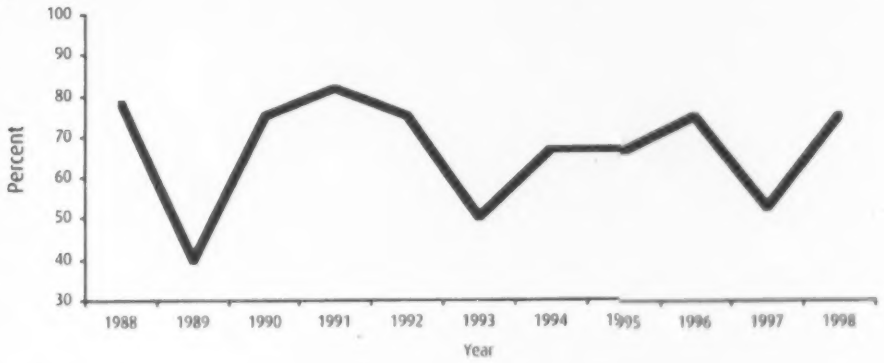
Figure 5.10
Home Healthcare Services National Labor Relations Board Elections, 1988-1998*, Total U.S.



*Through 9/98

Source: *Labor Database*

Figure 5.11
Percent Union Wins in Home Health Care Services National Labor Relations Board Elections, 1988-1998*, Total U.S.



Through 9/98

Source: *Labor Database*

Beyond having the right to negotiate contracts that may address issues like staffing and safe workplaces, unionized health care workers fare better financially than their non-union counterparts. According to the Bureau of Labor Statistics, for all occupations, non-union workers earned just 77 cents for every dollar earned by their union colleagues. The health care difference is not as dramatic, but substantial nonetheless. In 1999, non-union RNs earned $704/week while union RNs earned $829/week—a difference of 15 percent. Non-union physical therapists earned $732/week while unionionized physical therapists earned $923/week—a difference of 21 percent.

Figure 5.12
Union Wage Differential in Median Weekly Earnings for all Occupations, 1999, Total U.S.

Union	$ 672
Non-Union	$ 516
Non-Union to Union Earnings Ratio	0.77

Source: *Current Population Survey, 1999,* U.S. Department of Labor, Bureau of Labor Statistics

Figure 5.13
Union Wage Differential in Mean Weekly Earnings for Select Occupations, 1999, Total U.S.

Occupation	Union	Non-Union	Non-Union to Union Earnings Ratio
All Occupations	$711	$585	0.82
Registered Nurses	829	704	0.85
Licensed Practical Nurses	519	486	0.94
Physical Therapists	923	732	0.79
Clinical Laboratory Technologists and Technicians	699	612	0.88

Note: Occupational Therapists, Respiratory Therapists and Medical Scientists were omitted due to small sample size.

Source: *Union Membership and Earnings Data Book: Compilations of the Current Population Survey,* 1997 and 1999 editions

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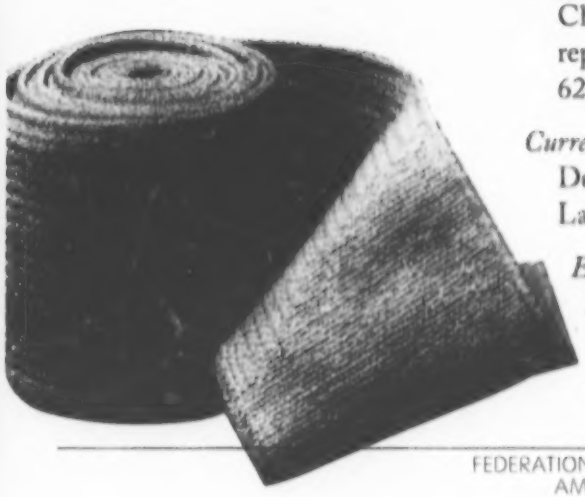

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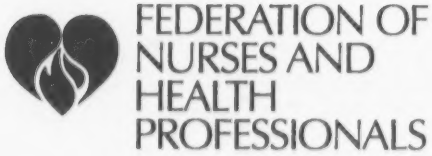

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